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CONTENTS: Vol. XLVIII. No. 9.

	PAGE		PAGE
A Fatal Experiment	319	New Companies and Company	
Anti-cutting Meeting in Bristol	326	News	318
Bankruptcy Reports	317	Newest Pharmacy in London ..	324
Business Changes	314	Next Week	336
Correspondence :—		Personalities	327
Wholesale Houses, Agents,		Röntgenography	324
and Discounts; Anti-cut-		Scotch News	308
ting	332	Trade-marks Applied for	318
Shops (Early Closing) Bill ..	333	Trade Notes	314
Legal Queries	334	Trade Reports	328
Miscellaneous Inquiries	334	Winter Session :—	
Information Wanted	336	Chemical Society; Royal	
Deaths	327	Institution; Western Chem-	
Deeds of Arrangement	317	ists' Association of Lon-	
Editorial Comments :—		Chemists' Assistants' Associa-	310
A Citronella-oil Arbitration ..	330	tion; Liverpool Chemists'	
A Common Danger	321	Association; Liverpool	
Wild Cherry Bark	322	Pharmaceutical Students'	
Truth on Carbolic-acid Poison-		Association; Plymouth and	
ing; Duplicate Commis-		District Chemists' Associa-	
sions; The Idler Test for		tion	311
Aconite; At the Indian		Cambridge Pharmaceutical	
Counter	323	Association; Midland Chem-	
English News	306	ists' Assistants' Associa-	
Foreign and Colonial News ..	309	tion; Edinburgh Chemists',	
French News	308	Assistants', and Appren-	
Gazette	317	tices' Association; Ulster	
Irish News	307	Pharmaceutical Association	312
Legal Reports	315		

EXPORT TRADE.

THE marked attention given at the present time to British export trade by the home Government throws special interest upon the issue of THE CHEMIST AND DRUGGIST to be published on March 14, for it will be circulated to all the merchant shippers in the kingdom who export druggists' goods of all kinds. This issue was established many years ago for the express purpose of fostering foreign and colonial trade, and we are able to say from experience that it has admirably fulfilled its intentions. We therefore urge all firms who have not yet secured space in our Merchant Shippers' Issue to communicate with the publisher at once, and he will furnish particulars showing the value of the issue for business purposes.

OUR EXCHANGE COLUMN.

SUBSCRIBERS may have observed from announcements made by the publisher that the Exchange Column will next week be transferred to the Coloured Supplement. That particular issue will have a circulation of over 14,000 copies, and there are doubtless many in the trade who may wish either to give or get bargains through it. We fancy that since our Exchange Column was started nearly twenty years ago it has been the means of advantageously transferring many thousand pounds' worth of property, and with the continued support of the trade that record should be maintained under the new conditions.

Summary.

THE addition of carbolic acid to the poisons-schedule is advocated by *Truth* in a forcible article, which we quote on p. 323.

WE announce the death of Mr. O. V. Morgan, J.P., one of the proprietors of this journal, and the first M.P. for Battersea (p. 327).

THE action in regard to the title-right in Yorkshire Relish has been argued before the Appeal Court. Judgment is reserved (p. 315).

FURTHER interesting observations on Röntgen's rays tend to clear up some of the mystery about how they act upon the photographic film (p. 324).

IN his paper on "Coal," read before the Midland Assistants' Association, Mr. H. Jessop described in an intelligent way the distillation of coal-tar (p. 313).

BELFAST chemists are considering the advisability of forming an Anti-cutting Union, consequent on the paper read by Mr. Camlin, and reported on p. 314.

SOME facts in regard to the origin of tuberculosis infection are noted on p. 321, where also the desirability of greater attention to milk-steriliser trade is indicated.

THE newest pharmacy in London, as far as we are aware, is one opened in Regent Street this month. We give some particulars of it and illustrate the interior on p. 325.

AN arbitration-case, respecting a consignment of citronella oil, is the subject of an article on p. 320, and is of special interest to buyers of goods by description and sample.

WEST of London chemists, led by Mr. J. C. Hyslop, protest against the B.P. being regarded as the standard for non-medicinal articles which happen to be official (p. 310).

A DEATH under chloroform, reported on p. 306, has resulted in the unusual course of a chemical examination of the æsthetic, with the result that it was found to be above suspicion.

WHILE experimenting with some materials for the production of a patent grease a London chemist has been killed by the explosion of the iron cylinder in which the materials were heated (p. 319).

A CHEMIST'S assistant, not qualified, has been fined at Liverpool under the Pharmacy Act for selling a preparation of opium. He is to pay the fine and heavy costs at the rate of 4s. a month (p. 315).

A MAN who professed to cure rupture by treatment has been ordered by the County Court Judge of Manchester to return 22/ 1s, which a Welsh farm labourer had paid to him on that profession (p. 316).

AN anti-cutting meeting (the first of a series of provincial meetings) was held at Bristol on Wednesday, when a deputation of the Proprietary Articles Trade Association spoke, and the local Association was asked to look after the anti-cutting movement in the district (p. 326).

MESSRS. DUNSTAN AND CARR have confirmed the observation of Richards and Rogers that in the combustion of aconitine by the absolute method double the theoretical percentage of "nitrogen" is obtained, but they find a considerable proportion of marsh-gas in the "nitrogen" (p. 310).

WATER SUPPLY is the subject of two notes reported in the Winter Session. Dr. E. Frankland has informed a Royal Institution audience that the Thames supply is good for half-a-century yet (p. 310). Professor Boyce lectured to the Liverpool Chemists' Association on the bacteriology of water (p. 312).

ACTIONS under the Sale of Food and Drugs Act, in respect to seidlitz-powders of deficient weight, are reported from West Bromwich and the Isle of Wight. In the former case the Magistrate held that the proper way to divide the purchase was to mix all the powders together and divide the bulk, and as this had not been done, he dismissed the summons (p. 315).



English News

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

The Chloroform Tested.

An inquest was held on February 21, at Dudley, on the body of Ernest Finsley, the son of a Dudley solicitor, who died whilst under chloroform. The evidence showed that the lad was desirous of entering the navy, but having some difficulty in the matter with his teeth was physically incapacitated. To remove the difficulty he went to Mr. Edward Morris, dentist, to have eleven of his teeth extracted. He expressed a desire to have chloroform, and, with his mother's consent, Dr. Bellingham, of Dudley, administered it. It was administered in the usual way with a towel after the doctor had made a stethoscopic examination of the heart and a general examination of the deceased's condition. He was satisfied with his examination. The chloroform had been purchased the same day from Mr. Richardson, chemist, Market Place, Dudley. Deceased was rather long in getting under the influence of the anæsthetic, and once he almost regained consciousness so that a second application was necessary. The eleven teeth were extracted, and the deceased's condition after the operation did not suggest anything wrong, but suddenly the doctor noticed a change, and pressed the chest to inflate the lungs. This was not successful and artificial respiration was resorted to for forty-five minutes, but the lad died under the anæsthetic. Mr. E. A. Warmington, analyst, stated that he had made nine separate and distinct tests on the remaining portion of the chloroform used, and came to the conclusion that it contained $\frac{1}{4}$ to 1 per cent. of alcohol. It had no deleterious ingredient, and had not suffered from decomposition to render it unfit for use. It was in conformity with the British Pharmacopœia. Dr. Messiter deposed to a *post-mortem* examination. He found evidences of considerable disease, but there was nothing to indicate it to Dr. Bellingham when he examined the boy. Moreover, he had been examined for the navy, and the disease was not then discovered. The jury returned a verdict of death from misadventure, and expressed the opinion that neither Dr. Bellingham nor the dentist was to blame.

A Prescribing Farmer.

An inquest was held at Carmarthen on February 19, touching the death of John Evans, aged 8 years, illegitimate son of Mary Evans, of Troedyrhiw. On the previous Thursday the deceased was taken ill, and Mr. Philip Rees, farmer, prescribed for him a certain mixture and a pill, but only half of the latter was administered. The boy got worse, and died on the Sunday. Mr. Rees gave evidence showing that he had an extensive practice. He was the proprietor of four patent medicines, known as "the Llanarthney Remedies." He was not a registered practitioner. Dr. Harries said he was called in to see the child, who was very ill, and ultimately died from pyæmia, caused by the state of his knee, the bone of which was getting diseased. He did not think the half-pill could have done either harm or good. Dr. E. R. Williams agreed. The Coroner strongly deprecated the administration of medicine by unqualified men, and referred to two other inquests he had held on bodies of persons who had been prescribed for by such men. He did not wish to say anything against Mr. Rees in particular—he only condemned the system. In this particular case the cause of death had been explained, but that did not justify the very risky practice of taking the prescriptions of unqualified men. The jury found in accordance with the medical testimony.

A Chemist's Evidence.

In a charge of assault heard at Arundel Police Court, on February 17, a chemist established for himself (with the consent of the Magistrates) a principle of reward for his

evidence which we are afraid cannot always be relied upon. The plaintiff was a sergeant-major, who alleged he had been unlawfully ejected from a lodge of the R.A.O.B. He called as a witness Mr. J. H. Longman, chemist, Littlehampton, who asked for his expenses before giving evidence. Complainant asked if he was obliged to pay. The Magistrates' Clerk said a witness could make the claim if he wished, whereupon 12s 6d. for half-a-day's pay and railway-fare was paid. The witness was not apparently favourable to the complainant. At the conclusion of his evidence he handed over 10s. for the benefit of the Sussex County Hospital.

Chemical Measures.

At the Liverpool Police Court, on February 20, the Boundary Chemical Company, Grundy Street, were fined 5s. and costs for using two illegal measures; also fined a similar amount for being in possession of six unstamped measures.

Alleged Breaking into a Chemist's Warehouse.

At the Coventry Petty Sessions, on February 20, John Thomas Luckham, a Coventry man, who gave a Liverpool address, was charged with breaking into the warehouse of Mr. Axford, chemist, and stealing goods value 2l. 16s. Prisoner was proved to have been in possession of articles similar to those lost. The defence was reserved, and prisoner was sent for trial to the sessions.

Embezzlement.

At Salisbury, on February 20, Albert Edward Davis was charged with embezzling various sums of money received by him on account of his employers, the Anglo-American Oil Company, and Mr. Newton, chemist and druggist, Salisbury, was called as a witness, and stated that on November 16 he purchased 40 gallons of oil from prisoner, to whom he paid 1l. 1s. 3d. Prisoner was sentenced to four months' hard labour.

Alleged Long-firm Swindling.

At Walsall, on February 20, Edward Ford and Sarah Preece, both with several *aliases*, were charged with obtaining soap by false pretences from the United Alkali Company (Limited), Runcorn. It was proved that consignments of soap were sent to prisoners, who traded in the names of A. Smith & Co, Walsall, and Prince & Co., West Bromwich, evidence of the delivery of the goods to prisoners being given in each case. Prisoners were remanded, in view of other charges being made by the Treasury.

Welsh Water for London.

In moving an amendment to the Welsh water scheme before the London County Council, the Earl of Onslow, who wished to postpone it, said he thought the committee had been dazzled by the magnificence of this scheme. Two great lakes were to be formed, and one, no doubt, would be called Lake Binnie; while the other, before the deep blue glories of which the beauties of Ulleswater were to pale, would, perhaps, be called Idriswater—sallies that provoked loud laughter.

A Dispenser in Bad Company.

James Linnell (49), described as a chemist, was charged at the East Greenwich Police Court on February 21 with receiving some bacon, well knowing it to have been stolen. Two men, named Garvey and Smith, were charged with having stolen the bacon, and the evidence against Linnell was to the effect that it was found in his possession, wrapped in a handkerchief belonging to him, he at the time being under the influence of liquor. He stated that Garvey borrowed the handkerchief, and that he knew nothing of the theft. Mr. Scard and Mr. Pook, solicitors, gave Linnell a good character, the latter saying that he was formerly dispenser at the Royal Kent Dispensary. Mr. Kennedy committed Garvey and Smith for fourteen days' hard labour each, and fined Linnell 5s., or five days, for unlawful possession.

Soapmakers Dine.

On Friday, February 21, Messrs. D. & W. Gibbs, of 16 Finsbury Circus, entertained the staff of their City and Wapping offices at a dinner at the Holborn Restaurant to celebrate the conversion (for family reasons) of their business into a limited liability company. The senior

partner, Captain D. A. Gibbs, occupied the chair, and other members of the firm were present. The company numbered thirty-three. The toast of "D. & W. Gibbs (Limited)," which followed the loyal toasts and was given from the chair, was most cordially received. Among other toasts "The Seniors" was responded to by the Chairman; for "The Managing Directors" Mr. D. C. Gibbs returned thanks, and this gentleman proposed "The Staff," remarking that whilst few firms in the City of London could claim a greater antiquity than theirs, he felt a special pride in seeing around him the faces of men who could count over thirty years' service with their house. Mr. J. Kempson, on behalf of the Wapping staff, and Mr. Hewitt, for the City office, made suitable and feeling speeches in response. "Our Representatives," proposed by Mr. K. Y. Gibbs, was responded to by Mr. R. S. Tucker (country) and Mr. C. W. Jewell (town); and, lastly, for "The Visitors" Mr. W. R. Challis replied. During the evening humorous musical sketches were given by Mr. G. Robins in the style of the late Mr. Corney Grain. These were very successful.

The K.O.P. Club.

The Shrewsbury chemists' assistants are entitled to the credit of the invention of a new title for themselves. They formed themselves into an association in October, 1894, but instead of following the usual course of prolixly describing themselves as the Shrewsbury and District Chemists' Assistants' and Apprentices' Association, for the torture of editors, they assumed the concise designation of the K.O.P. Club. K.O.P. means knights of the pestle. They have admitted mutual friends from time to time, and now they muster nineteen members. They meet once a week for social intercourse from October to March, and occasionally in the summer months for country rambles. One evening last week they held their first *conversazione* at an assembly-room in the town, and entertained about forty guests. The programme consisted of a smoking-concert with a supper intervening. Mr. Alderman W. G. Cross was in the chair, and another alderman was present as a guest.

London County Council and Proprietary Articles.

At the weekly meeting of the London County Council held at the County Hall, Spring Gardens, on Tuesday, on the reception of the report of the Asylums Committee, Major Probyn asked the Chairman if he would issue corrected tenders for the supply of drugs and medical preparations to the asylums, amended by the omission of names of special manufacturers of articles the composition of which was well known. Mr. McDougall (Chairman of Committee) said that what Major Probyn desired had already been done. A fresh schedule of drugs had been sent out. They always avoided as far as possible having proprietary articles. In this instance one got in by error.

The L.C.C. and an Expert's Fee.

It will be remembered that, a short time ago, Dr. E. Frankland, one of the members of the Board of Trade Standards of Light Committee, sent in an account for 56l. 11s. for services rendered on that committee. The authorities applied to all declined to pay these fees, on the grounds that no other member asked for payment, and that services on such departmental committees were always honorary. The London County Council have, however, lately, we understand, obtained the consent of the Local Government Board to pay the claim.

Kicking Druggists.

Barron, Harveys & Co.'s Football Club defeated the United Gardeners by 3 goals to 1 goal on February 22.

The Sale of Chlorodyne.

On Monday, Mr. H. J. Robinson, Coroner for East Lancashire, held an inquest at Darwen touching the death of Florence Ainsworth, 2 years of age, who had died after taking a dose of chlorodyne. The chlorodyne was sold wholesale to Mrs. Leach, a neighbour, by a traveller in the employ of Mr. Grime, chemist, but he had no idea that she wanted it simply for her own use. Several members of the Ainsworth family being troubled with coughs, Mrs. Ainsworth went to Mrs. Leach and asked her to sell her a little chloro-

dyne. Mrs. Leach replied that she did not sell it, but she would give her a little, and she did so. Mrs. Ainsworth mixed it with half a cupful of hot water, and it was let down with water again before it was given to the children. On the morning of February 21 the grandmother of deceased gave two of the elder children some of the mixture in a wineglass, and deceased cried for some. To pacify her, she let her drink what was left in the wineglass. Deceased fell asleep until dinner-time, when she had some food, and slept again until 3 P.M., when she was attacked with something like a fit. Dr. Baxter was called in, found deceased in a comatose state, and prescribed a warm bath, but deceased never rallied, and died the same evening. Dr. Baxter made a *post-mortem* examination, and found traces of morphia. The Coroner pointed out there was no mark of poison on the bottle, nor anything to show what the dose was. There was a home-made label bearing the word "Chlorodyne." Dr. Baxter said that chlorodyne ought not to be sold without a label, and in answer to a further question he said that a child of the age of deceased should not be given chlorodyne at all. Mr. Grime, on being summoned before the jury, explained the circumstances under which the chlorodyne had been sold, and said he made it a rule when selling chlorodyne to caution people and put a red label on the bottle. The jury returned a verdict to the effect that deceased died from narcotic poisoning, and exonerated Mr. Grime from any responsibility in the matter.

Carbolic-acid Poisoning.

James Cox (51), miller, Kidderminster, committed suicide with carbolic acid last week. His mind had become unhinged in consequence of the discharge of his daughter from her situation.

Annie Walker (17) poisoned herself with carbolic acid on February 19, because she was afraid of being discharged for not going to work one day. The Manchester Deputy-Coroner at the inquest said carbolic acid was a poison too easily obtained. He was strongly of opinion that there ought to be some restriction on the sale of it. Hardly a week passed without a case of carbolic poisoning being dealt with at that court, one of the reasons being that the poison was so easily got.

Another case of suicide by carbolic acid was reported from Wednesbury on Saturday. The victim was a woman, and she had obtained the drug from a neighbour, ostensibly for a purpose other than that to which it was ultimately put.



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Action Against a Chemist.

On Monday in the Exchequer Division, Dublin, a motion to change the venue in a case between a doctor and a chemist was heard. The action is brought by a doctor practising in Bangor, County Down, to recover from Mr. William Hanna, a chemist in the same town, the sum of 1,000l. damages. The complainant alleges that the defendant slandered him in his professional capacity. The defendant, whilst denying that he ever used the defamatory expressions complained of, also pleads justification. A number of witnesses are to be examined on both sides, and apparently they all reside in or near Belfast. The venue is laid in Dublin by the plaintiff, but the defendant alleges that a less expensive and more convenient trial could be had in Belfast at the forthcoming assizes. The Court changed the venue.

A Dangerous Dip.

Jane Smith last week stole a can of sheep-dip from the drug and chemical store of Mr. W. Lawson, Limavady. She was sent to gaol for fourteen days "hard."

Pharmaceutical Chemists' and Apothecaries' Assistants' Association of Ireland.

The committee of this Association met on Friday last week to receive the report of the committee appointed to arrange about the room which the Pharmaceutical Society was willing to lend for their meetings. Mr. O'Sullivan stated that, in accordance with the resolution adopted at the previous meeting, he wrote to the Registrar of the Pharmaceutical Society accepting the kind offer of the Society, provided the latter and the executive of the Association came to a mutually satisfactory understanding. Mr. Ferrall, in reply, stated that the Association might have the use of the committee-room every alternate Friday evening from 7.30 P.M. to 10.30 P.M., subject to the pleasure of the Council; but the Association was not to use the house for any purpose but the stated meetings, and was not to have its letters addressed to the house. Messrs. Hardy and Corcoran subsequently waited on Mr. Ferrall, who explained that the Association would have at its disposal every alternate Friday, free of all expense save a nominal sum for cleansing purposes, the room ordinarily used for the materia-medica lectures. They would enjoy, free of charge, fire, light, &c., and Mr. Ferrall was good enough to say that in the opinion of the Society the action of the assistants in seeking the accommodation was a proper one and a step in the right direction. It was stated that the room would hold between thirty and forty persons. Mr. Harris thought this would be too small for a full general meeting. Mr. Hardy said he anticipated the difficulty, and had asked the Registrar the very query now before the meeting, and was told that so far as could be judged the request for a larger room at certain periods would be granted if asked. Mr. McCarthy thought, the Society having met them in so generous a fashion, they should be chary of encroaching unduly on their kindness; but Mr. Hardy said, as they purposed inaugurating their removal to the Society's house by a lecture from Dr. Falkner, it might perhaps be desirable if they laid the circumstances before the Council, with a view of being granted on that occasion the use of a larger room. After some conversation the following resolution was proposed by Mr. Payne, seconded by Mr. O'Sullivan, and carried unanimously:—

That the best thanks of this Association are due and are hereby tendered to the Pharmaceutical Society of Ireland for its generosity in granting to the members of this organisation the use of a room in which to hold its meetings; and we hereby accept the room subject to the conditions laid down by the Society, to which we agree.

A deputation, consisting of Messrs. Alister, Hardy, and O'Sullivan, President, Secretary, and Assistant Secretary respectively, was appointed to wait upon the President of the Pharmaceutical Society, with a view of being granted the use of the Examination Hall for the opening meeting three weeks hence. It was hoped that Mr. Wells and the other members of the Council would recognise the Association by becoming honorary Vice-Presidents. Mr. Payne, Hon. Treasurer, stated that about 60 out of a maximum of 100 members had paid their subscriptions. To a few of those in arrear he had sent as many as four notices, but had not received replies. Some who had gone away from Dublin would subscribe if asked, and he purposed writing to these.



Scotch News

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Edinburgh Pharmacy Students' Supper.

On Friday evening, February 21, the eighth annual supper of Mr. W. Duncan's classes at the Royal Dispensary was held

in the Grand Restaurant. Over sixty sat down to table, and after supper the proceedings took the form of a smoking-concert, when an excellent programme of toasts, songs, and recitations was gone through. After "Her Majesty" had been toasted, the students, through Mr. McVitie, gave the principal a surprise by presenting him with a silver coffee-pot, while their regard for Mr. Duncan's assistants was also expressed in handsome gifts—Mr. Mackenzie receiving a case of silver-mounted pipes, and Mr. German a gold signet-ring. The toast of "The Pharmaceutical Society" was proposed by Mr. McLaren, and replied to by Mr. George Coull. "The Board of Examiners" was proposed by Mr. McVitie; Mr. Boa, who replied, gave some amusing examples of the various candidates met in the rooms, who presented themselves so "bung full" that an examiner had often great difficulty in getting out the bung. As to the musical programme, Mr. Hudson, one of the students, distinguished himself by his piano accompaniments, and the songs and instrumental solos were all of a high order.

Unregistered Dental Practitioners.

The half-yearly meeting of the Scotch branch of the Unregistered Dental Practitioners' Defence Association was held in the Christian Institute, Glasgow, on Wednesday, Mr. Smith (Vice-President) in the chair. The Secretary (Mr. A. D. Reid) submitted a report of the business transacted at the half-yearly meeting in Manchester. At that meeting it had been resolved to alter the name to Unregistered Dental Practitioners' Association of Great Britain. The officials were endeavouring to get the Association registered under the Joint-stock Companies Act. The articles were being drawn on similar lines to that of the National Herbalists of Great Britain. If this attempt was successful members were safe under the law, as any member of the Association could place up the words "Dental Practitioner" over his door, and run no chance of prosecution. The British Dental Association had been made a chartered company within the last few months, and seemed to control the trade in artificial teeth in Glasgow. At the end of the present month the books of the Association would be closed, and on reopening the entrance-fee would be 5 guineas, instead of 2 guineas as at present. The report was unanimously agreed to.

French News.

(From our Paris Correspondent.)

THE RÖNTGEN RAYS.—Public demonstrations of the rays are being given at one of the leading cafés on the Paris Boulevards. An entrance-fee of 1f. each person is charged, and the public evidently take considerable interest in the photography of the invisible.

PHARMACY ASSISTANTS.—The Syndical Association of Pharmacy Assistants announce that they intend organising a banquet in the course of next month which will have something of a political character about it and will be under the auspices of "an important group of deputies."

BRITISH MEDICINES IN FRANCE.—At a board meeting of the British Chamber of Commerce in Paris held on February 21, the question of the regulations concerning English pharmaceutical preparations coming into France was discussed, and the Chamber seems inclined to take the matter up.

A PRIEST PHARMACIEN.—The case of a pharmacist who has joined a religious brotherhood and still continues to exercise his profession is rare. Such a circumstance has, however, taken place in connection with the nursing fraternity of Saint Jean-de-Dieu, who are held in very high esteem in Paris. The community established a hospital at Nazareth, Palestine, some years ago, and now they have a priest pharmacien attached to it to take charge of the dispensary.

PHARMACIENS DANCE THE "GIGUE."—On the evening of Shrove Tuesday the Central Hotel at Biarritz was gaily decorated in honour of the guests of the assistants in the British pharmacies of the popular watering-place, who celebrated the *Mardi gras* by giving a dance to their friends, of whom over 150 attended. Supper was served at 1 A.M., and after that dancing was continued until dawn, culminating in

what the local French paper describes as "*la gigue, danse nationale anglaise.*"

ADULTERATION OF MEDICINES IN LYONS.—A number of Lyons pharmaciens have lately been severely fined for selling a solution of Glauber's salts in bottles bearing the Hunyadi Janos label, of iodoform adulterated with 25 per cent. of sugar, and of subnitrate of bismuth containing half its weight of phosphate of lime. The honest colleagues of these cheats demand in the *Bulletin de Pharmacie* of Lyons that in the case of future convictions the fine should be supplemented by the publication (at the expense of the person convicted) of the sentence in the daily papers of the town, partly for the purpose of calling attention to the case, and partly in order to show the public that it is impossible to supply unadulterated goods at the prices asked by those cutting firms.

DR. ROUX.—A representative of the *C. & D.* writes:—"A few days ago I saw Dr. Roux at the Pasteur Institute. I cannot say that I recognised him from his portraits. He is a trifle bent, and walks with the preoccupied air of an over-busy man. His face is pale and somewhat drawn—in fact, he is the embodiment of hard study. His short jacket, round hard-felt hat and general lack of smart dressing give the same idea. He is, however, very civil, as are all the French savants I have met. I did not keep him, for his time is evidently precious, and he seemed counting the moments while he supplied me with the information I asked for about the Institute. In short, he gives one the idea of a man who has passed a hermit-like life in laborious study, and I should imagine he cut a curious figure at the Hotel de Ville celebration when he was presented with a gold medal for his discovery of the anti-diphtheria serum. An entire lack of 'pose,' of course, but for his hurried style and his red rosette one might take him for the least important member of the Institute. Quite the working bee again."

Foreign and Colonial News.

ARTIFICIAL HONEY.—It is announced that a big factory for the manufacture of artificial honey from crystal sugar, natural honey, and salicylic acid is being built in Germany. The chief sale for the product is to be in the Rhine country.

RECAMIER'S CREAM.—It is reported that the New York company which manufactures Mrs. Harriet Hubbard Ayer's Recamier cream and other toilet-preparations is insolvent. The liabilities amount to \$126,334, and the assets are \$7,858 and the trade-marks and formulæ. The company was started in 1887 with a capital of \$50,000.

CARBOLIC-ACID POISONINGS IN HOLLAND.—The number of fatal cases of carbolic-acid poisonings in Holland has lately increased so rapidly that the pharmaceutical organisations of the Kingdom have proposed to address a memorandum to the Government, asking to make it illegal for anyone to sell carbolic acid, otherwise than in 2-per-cent. solutions, excepting against a medical prescription.

FLUID MAGNESIA IN BRAZIL.—A certain brand of fluid magnesia is used extensively in Brazil in the treatment of yellow fever, and this fact has induced two gentlemen in Rio de Janeiro to commence the preparation of the solution in Brazil, in the hope of ousting the foreign product. One of the would-be Brazilian manufacturers is an influential politician, and he is now trying to obtain an increase in the Customs duty on imported fluid magnesia to such an extent as practically to prohibit importation and give him a monopoly.

ITALIAN CUSTOMS LABORATORIES.—The slow and vexatious regulations of the Italian Custom-house are notorious, and applications have been frequently made to the Italian Government for the establishment of chemical laboratories, where disputes as to the nature of goods imported into Italy may be quickly and cheaply settled. The Italian Government have now returned a favourable answer to these appeals and established such a laboratory at Leghorn. A second one is to be opened shortly in Milan, and others are being organised in Naples and Venice.

THE CARRIAGE OF ACETYLENE AND CALCIUM CARBIDE IN GERMANY.—The following regulations have been issued

for the carriage of acetylene and calcium carbide on the German railways—"The rules relating to the despatch of liquid carbolic acid and nitrous oxide are also to be applied to liquid acetylene, with the additional proviso that vessels used for acetylene-carriage may not contain any parts of copper, brass or other copper alloys. The pressure-test is to be applied to all containers, and the maximum admissible is, for acetylene, 250 atmospheres and 1 kilo. of liquid for every 3 litres of space in the vessel. Calcium carbide must be packed in iron vessels closed airtight, and no other goods may be added to any package containing either acetylene or calcium carbide."

THE FORTHCOMING PHARMACEUTICAL EXHIBITION AT PRAGUE.—The executive committee of the forthcoming Prague Pharmaceutical Exhibition have recently had an audience with Count Badeni, the Austrian Prime Minister, from whom they asked for Government aid in the promotion of their exhibition. Count Badeni complimented the promoters of the exhibition upon the success that has attended their efforts up to the present, and especially upon the fact that the various nationalities of Bohemia, which are notoriously antagonistic, have worked together loyally for this exhibition. He promised the moral and material support of the Government to the undertaking. It is also announced that the Austrian War Office have decided to give their assistance, and to send in an exhibit of field-hospital treatment and military pharmacy generally.

ANTI-CUTTING IN MAINE.—The Cumberland County Pharmaceutical Association, Maine, U.S.A., has formed a scheme of anti-cutting which is meeting with success. Wholesale and retail druggists are in it, and each member agrees to stick to the prices in the association's price-list, and not to give discounts to anyone, nor "offer any special inducements in shape of presents to customers for the purpose of securing their trade on the articles in the list." The means taken by the association to punish violation of the rules is simple. On joining the association a member signs a bond for \$25, which has twenty-five coupons attached to it, each for \$1. This coupon reads:—"The undersigned will pay to the Treasurer of the Cumberland County Pharmaceutical Association the sum of one dollar on presentation of this coupon, countersigned by the Executive Committee of said Association." When the member cuts a price, one of these coupons is presented to him, and he must pay. If anyone wishes to withdraw from the association sixty days' notice must be given.

ASSISTANTS' SALARIES IN DENMARK.—There has been a good deal of agitation among Danish chemists' assistants recently on the subject of the alleged insufficiency of their salaries, and the Assistants' Association has drawn up a tariff based upon the turnover of the shops, which they ask the Pharmaceutical Association of the country to accept as binding upon its members. The tariff applies only to pharmacies having an annual turnover above 12,000 kroner, or, say, 650l. The demand is made that any shop having a turnover of between 12,000 kroner and 24,000 kroner, shall employ an assistant with a salary of 1,500 kroner. Shops with between 24,000 kroner and 36,000 kroner turnover shall employ two assistants, one at 1,800 kroner and the other at 1,500 kroner. Shops with from 36,000 kroner to 48,000 kroner turnover are to employ three assistants, receiving respectively 2,100 kroner, 1,800 kroner, and 1,500 kroner. Shops turning over 48,000 kroner to 60,000 kroner to keep four assistants, receiving respectively 2,400 kroner, 2,100 kroner, 1,800 kroner, and 1,500 kroner. Shops with a turnover of from 60,000 to 72,000 kroner to keep five assistants, with salaries of 2,400 kroner, 2,400 kroner, 2,100 kroner, 1,800 kroner, and 1,500 kroner; and for every additional 12,000 kroner turnover, an extra assistant with a salary of 2,400 kroner is to be employed. The Pharmaceutical Association have acknowledged the memorandum in a very cold reply, in which they point out that the adoption of the proposed tariff would not only apply to present and future pharmacists carrying on business under ordinary conditions, but also to those who are saddled with certain payments to the widows of former proprietors, or to pharmacists who held their shops upon special terms. The Pharmaceutical Society throw the responsibility for the consequences of the adoption upon the assistants. It is contemplated to get up an agitation to enforce the provisions of the assistants' tariff.

The Winter Session.

CHEMICAL SOCIETY.

THERE was comparatively little in last week's programme of direct, or even indirect, interest to chemists and druggists. An indication of the approaching anniversary meeting was given by the President in his intimation that Professors Dewar and Tilden would be proposed for the vice-presidency, and Professor Smithells, Dr. Forster Morley, Mr. J. W. Rodger, and Dr. G. H. Morris as members of Council. Mr. Bertram Blount, Mr. H. Brereton Baker, and Dr. John Shields were appointed auditors of the accounts.

Dr. Stanley Kipping and Mr. Francis H. Carr were appointed scrutators of the ballot for the election of Fellows, and later in the evening it was announced that the whole of the candidates had been elected. Amongst them were Mr. Charles E. Sage, pharmaceutical chemist, Mr. Aitken Simpson, chemist to Barron, Harveys & Co., and Mr. Jos. E. Morrison, a Canadian pharmacist, and one of the vice-presidents of the American Pharmaceutical Association. There was almost a cheer when it was found that there had been no blackbal-ing.

The paper read which interests chemists and druggists was one from the Pharmaceutical Society's research laboratory, and by Professor Dunstan and Mr. F. H. Carr, "On a difficulty encountered in the determination of nitrogen by the absolute method." It were better to speak of it, however, as

AN ACONITINE PAPER

so far as our interest in it is concerned. Professor DUNSTAN made the communication. He said that the ordinary formula for aconitine, $C_{33}H_{45}NO_{12}$, requires 21 per cent. of nitrogen, a proportion which the results of his investigation have fairly conformed to. He had worked by the soda-lime method. Richards and Rogers have stated, in a paper published about five years ago (*THE CHEMIST AND DRUGGIST*, February, 1891), that the amount of nitrogen evolved is 4.4 per cent., and that this agrees with a formula having N_2 in it—e.g., $C_{30}H_{43}N_2O_{12}$, as they put it. Dunstan and his associates noted the paper when it was published in *THE CHEMIST AND DRUGGIST*, but were then engaged in other work which prevented them going into the point raised by Richards and Rogers; but, in conjunction with Mr. Carr, Professor Dunstan has now taken the matter up, with the result that they entirely confirm Richards and Rogers' observation, but have discovered what gives rise to the apparently large yield of nitrogen.

Using the absolute method adopted by Richards and Rogers—i.e., heating with cupric oxide and a copper spiral—the authors obtained 4 per cent. of nitrogen, and other experiments confirmed this result. Thereupon four independent workers were asked to investigate the matter, and they substantially agreed, the following being amongst their results from combustion of aconitine and aconitine hydrochloride:—

By the Dumas method: nitrogen obtained, 4.4, 4.05, 4.15, 4.3, 5.3, and 5.1 per cent.

By the vacuum method: 3.79 and 4 per cent.

By the soda-lime method, 2.4, 2.43 and 2.63 per cent.

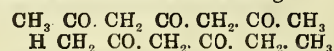
It being apparent from these varying results that there was a leak somewhere, the authors decided, after some hesitation on account of cost, to "combust" $\frac{1}{2}$ gramme of aconitine, and on examining the 16 c.c. of gas obtained found that it contained a considerable percentage of marsh gas. How this arose the authors could not explain, but they thought the copper spiral had something to do with it, and the object of their communicating the matter to the Society was to learn if anyone had experienced the difficulty.

Thereupon Dr. PERKIN and Professor ARMSTRONG talked about the matter in a conversational way, saying that alkaloidal bodies are exceedingly difficult to consume utterly. Mr. PAGE, of the London Hospital, agreed, and Dr. NORMAN COLLIE suggested spectroscopic examination of the gas, as he had found in preparing helium a trace of a carbon compound which had probably arisen in the same way. "No; the carbon compound comes from a dirty tube," chimed in Mr. JACKSON, who has also worked on helium. Then Mr. JOWETT spoke suggestively, and Professor DUNSTAN replied.

The rest of the meeting was taken up by the following papers:—

1. "The Origin of Colour; the Yellow 2:3 Hydroxynaphthoic Acid";
2. "Note on Etherification";
3. "The Relation of Pinene to Citrene." All by Professor Armstrong.
4. "The Formation of Naphthalene and Isoquinoline Derivatives from Dehydracetic Acid." By Dr. Collie and Mr. N. Wilsmore.
5. Professor Dunstan and Mr. F. H. Carr's paper.
6. "Mixed Diazoamides containing an Orthonitro Group." By Professor Meldola and Mr. F. W. Streatfeild.
7. "Allyl-p-dinitrodiazoamidobenzene: a Study of the Relations between Melting-point and Constitution." By Professor Meldola and Mr. F. W. Streatfeild.

Professor ARMSTRONG communicated verbally Nos. 1 and 3, and Mr. WILSMORE communicated No. 4. When we say that both of the communications were made up chiefly of talking to the blackboard and of this sort of thing—



—we think most of our readers will prefer to consult the original papers, should they ever yearn to know all about the matters to which they refer. It was almost amusing to watch the guilty-like manner in which the Fellows dropped out of the meeting one by one while Professor Armstrong and Mr. Wilsmore were performing, until just about a score remained to hear Professor Dunstan. Nos. 2, 6 and 7 were taken as read.

ROYAL INSTITUTION.

LAST Friday evening was the second chemical night of the session, the lecturer being Dr. E. Frankland, F.R.S., and his subject the "Present, Past, and Future Water-supply of London." Sir Frederick Abel presided. The lecture was popular in character. Dr. FRANKLAND stated, amongst other things, that it was not till 1856 that filtration of public water was made compulsory. Even then for years the process was carried on carelessly, and improved but slowly till 1883, since which time it has been uniformly excellent, so that though a single drop of unfiltered Thames water sometimes contains nearly 3,000 living organisms, after filtration only two or three can be found. In regard to future supply, Dr. Frankland agreed with the conclusion of the Royal Commissions that the quantity of water obtainable from the Thames basin is so ample as to render the necessity for going elsewhere a remote contingency. There is no other river-basin in Great Britain, he said, which affords such an abundant supply of excellent water. After the present wants of London had been supplied, there is a daily average of 1,000 millions of gallons to spare, and the means of storing as much as will tide over long periods of drought will yet be devised. There would be nothing heroic in making reservoirs in the Thames basin, and by such comparatively simple means Londoners, in his opinion, would have at their doors, for half a century at least, an ample supply of water which, for palatability, wholesomeness, and general excellence, could not be surpassed by any supply in the world.

WESTERN CHEMISTS' ASSOCIATION OF LONDON.

At last week's meeting of this Association a discussion took place on

THE BRITISH PHARMACOPOEIA AS A STANDARD UNDER THE FOOD AND DRUGS ACTS.

The discussion was opened by Mr. J. C. HYSLOP, President of the Association, who put the question, "Ought the British Pharmacopoeia to be used as a standard under the Sale of Food and Drugs Acts?" and replied—"Decidedly not. The first B.P. was published in 1864. The Sale of Food and Drugs Act was passed in 1875, and the Act to amend it in 1879. Yet not a word is found as to the Pharmacopoeia in either of the two Acts. Can it, then, be possible that the framers of those statutes had the least idea of making the Pharmacopoeia a standard in their administration?" The question is not a simple one, nor uninteresting, for the term "drug" occurs in the Act as often as the term "food," and one would naturally expect that where so much is said of "drugs" the Pharmacopoeia would to some extent be recognised. Hence the omission becomes the more significant. But is there any standard mentioned for "food"? No

Why, then, should we expect to find one for "drugs"? The idea has arisen purely from the indolence and incapacity of those whose office it is to look up the sinners and mete out the punishment. They are down upon the poor milk-sellers, because they think it is so easy to determine the amount of water that has been mixed with the milk, and they are down upon the unfortunate chemist for a similar reason: he has a book in plain English, to be his one standard of strength and composition for the substances which the physician prescribes. So they are ever meddling with this book and with him in his dispensing business. Pity the Pharmacopœia is not still in Latin, which might confine men more to their true and proper callings.

The omission of any reference to standards was very early recognised as a defect in the 1875 Act, so it was amended four years later, with the object chiefly of adopting standards for brandy, whisky, rum, and gin.

The essential function of the Sale of Food and Drugs Acts is evidently to come to the rescue of the purchaser, with reference to his lameness as to that time-honoured motto *Caveat emptor*: "Let a buyer take care of himself." It was found that the tricks of trade were so guileful and varied that a buyer could not take enough care of himself, and the Acts were passed to render his self-help more possible and easy. They have thus entirely to do with trade, and nothing whatever with the dispensing-counter.

If a sausage-maker uses bad meat his offence does not come within the Sale of Food and Drugs Acts but under another Act. Similarly, if a dispenser of medicines commits an offence against the B.P., he may be proceeded against under the provisions of the Pharmacy Act, 1868, section 15, which reads: "Any person who shall compound any medicines of the B.P., except according to the formularies of the said Pharmacopœia, shall for every such offence be liable to pay a penalty or sum of five pounds." If, therefore, one is asked for a seidlitz-powder, the proper course is to supply "pulv. sodæ tart. efferves." B.P., for we are told in a footnote enough to imply that this is what a doctor is most likely to mean by telling his patient to take a seidlitz-powder. If one gives a larger or smaller dose it may be an offence under the Pharmacy Act, but has nothing to do with the Food and Drugs Acts, the object of which is to prevent fraudulent and deleterious admixture with articles of food or physic. In support of this view there is the schedule to the 1875 Act, which gives the form for the analyst's certificate, in the course of which the analyst has to say:—

I am of opinion that the same is a sample of genuine or I am of opinion that the said sample contained the parts as under, or the percentages of foreign ingredients as under. Then there comes a space for observations, with a footnote to explain that "here the analyst may insert at his discretion whether the mixture (if any) was for the purpose of rendering the article portable, or palatable, or of preserving it, or of improving the appearance, or was unavoidable, and may state whether in excess of what is ordinary or otherwise, and whether the ingredients or materials mixed are, or are not, injurious to health."

These are some of the grounds on which the author based his opinion that the Food and Drugs Acts have nothing whatever to do with the B.P., or with the dispensing of medicines. He then called attention to a few of the incongruous results if his reading were not right. Poor people on a Sunday, when other shops are closed, could not get their cheap carbolic acid because the chemist may not sell any but the B.P. article. What would the Lords of the Privy Council think of this? Burden the taxpayer, perhaps, so that an article as useful for wrapping up dirtiness as for promoting suicides might be supplied gratis and *ad lib.* Then as to wax. White wax B.P. is bleached beeswax; but there is plenty of very useful white wax which is not the produce of bees, and in certain arts it is preferred for its suitability as well as its cheapness. Chemists know people's respective wants in these matters better than other men, yet they are to be prohibited from selling these things if the same name also happens to occur in the B.P. with tests and a standard to determine the exact variety of the article that is to be used in medical dispensing. Then essential oils are quite on all fours with the wax question. The oils of juniper, lavender, peppermint, and rosemary, for medical purposes, cost from 3s. to 8s. per oz., whilst the public requires an article worth from 6d. to 1s. an oz. Are chemists not to supply these varieties because they happen to be chemists, and although

these are as good as the dearer kinds for the purposes required?

Indeed, it comes to the old, old tale—a case of trade *versus* pharmacy. Mere buying and selling is always overshadowed by the *caveat emptor* notion, joined of late with the threatenings of the Food and Drugs Acts, as against the mere trader, who, by means fair or foul, will press for the uttermost farthing of profit. The dispensing of medicines, whether by verbal or written directions, is, on the contrary, illuminated by the special light of the B.P., which is supplemented by the skill and experience of the dispenser, who, mindful of his high vocation, is half insulted when he meets with the *caveat emptor* idea across his own counter; he has more than enough of this in selecting his own drugs and the preparations which he has no time or convenience to prepare for himself. The ideas that guide his life's business come from quite another quarter, have quite a different ring about them. In the forefront stand leaders such as these:—*Caveat dispensator* (let the dispenser take the care) and *Noblesse oblige* (one's distinguished position involves great responsibilities).

DISCUSSION.

Mr. MARTINDALE said that although he felt he was placed in a somewhat difficult position, as he was on the Pharmacopœia Committee, he would like to say a few words on what had been said by Mr. Hyslop. He must certainly say at the outset that he was in favour of the British Pharmacopœia being taken as a standard for the drugs and preparations contained therein, and considered that when any official drug or preparation was sold which was not exactly identical with that mentioned in the Pharmacopœia, it should be distinctly labelled as such, and if necessary the chemist should be careful to explain to his customer that he was giving him a "special preparation" and not the one mentioned in the Pharmacopœia. He knew that there were considerable difficulties in the way, especially with articles supplied for commercial purposes. He felt sure, however, that convictions would not be obtained in such cases as the sales of carbolic acid, soda-water, &c., and other matters might well be left to the discretion of the trained pharmacist.

Mr. PARKER said that to have the British Pharmacopœia as a standard for drugs and preparations for medicinal use was highly desirable, but he considered it practically impossible that it could be taken entirely as a standard under the Food and Drugs Acts. It was ridiculous to suppose that such things as hyposulphite of soda and essential oils of peppermint, rosemary, &c., which were articles of everyday demand, and used for other than medicinal purposes, should always have to be supplied by the chemist up to the B.P. standard, and it would add considerably to the burdens of the chemist if he were obliged to explain the difference to his customers every time that he sold any article.

Mr. R. A. ROBINSON agreed entirely with what Mr. Parker had said. He also considered it was undesirable that synonyms should be mentioned in the Pharmacopœia.

Mr. W. WARREN said it would be very inconvenient to many chemists if they were always expected to supply articles of the standard of the B.P. to the public; he believed, for instance, that a great many chemists had a particular formula of their own for seidlitz-powders, and that their customers came to them especially for these particular powders, and would take no other. He especially agreed with Mr. Robinson that synonyms should not be included in the Pharmacopœia.

Mr. MARSH said he considered that the chief point in the seidlitz powder cases was that it really became a question of dose, and that the chemist had been convicted for giving a larger dose than that mentioned in the Pharmacopœia, as the relative proportions of the ingredients were the same as in the official powder. He presumed that if the decision were upheld it would be unlawful for a chemist to sell a black draught of a larger dose than was given in the Pharmacopœia.

Mr. HORSLEY considered that the Pharmacopœia should be taken as a standard for prescribing and trade protection only.

After some further discussion, in which several members took part, Mr. ROBINSON proposed, and Mr. PARKER seconded—

That the Pharmacopœia should be taken as a standard for the drugs and preparations named in it which are intended for medicinal purposes only, and not for those which are sold for commercial purposes.

This resolution, however, met with some opposition from several of the members present, and it was finally decided to adjourn the meeting *sine die*.

CHEMISTS' ASSISTANTS' ASSOCIATION.

A MUSICAL and social evening was held last Thursday in place of Mr. Manger's paper on "Filtration," which was postponed *sine die*. Mr. Hill, the President, presided. There was a plethora of talent, no fewer than fourteen of the members having come prepared to assist if necessary. There was no printed programme, owing to the short notice Mr. Manger had given the Secretary. During the interval the following gentlemen were proposed as patrons:—Dr. Reynolds Green, F.R.S.; Mr. P. W. Squire, F.C.S., and Mr. Peter MacEwan, F.C.S.

LIVERPOOL CHEMISTS' ASSOCIATION.

THE February meeting of this Association was held at the Royal Institution on Thursday February 20, Mr. M. Conroy (President) in the chair. There was a very full attendance of members. Dr. C. Symes exhibited two Röntgen rays photographs, printed direct from the negatives—one of the human hand, and the other of a box of mathematical instruments.

The PRESIDENT then called upon Professor ROBERT BOYCE to deliver his lecture on

THE BACTERIAL ANALYSIS OF WATER.

The lecturer commenced by showing lantern-views of water-bacteria, and said that it is a fallacy to suppose that sunshine has the effect of increasing bacteria in water. Investigations made at the Potomac showed that micro-organisms to the extent of 3,000 to a cubic centimetre were found in January; these gradually fell until in October there were only 75 to the centimetre, and after that time there was a continual rise. Rain, snow, and surface-water, multiply the organic matter in river-water. Freezing does not destroy bacteria, but prevents their multiplication. Water containing 500 of these organisms in a cubic centimetre is suspicious, and 1,000 indicates direct sewage-contamination; but below 100 there is comparative immunity from danger. At many German waterworks bacteriological laboratories have been established, and if it is found that the water holds 50 bacteria to the cubic centimetre the supply is stopped. Speaking of filtration, the Professor said that during an examination of thirty different kinds of domestic filters it had been found that where there were 100 to 200 bacteria in water when poured into the filter there were 1,000 when it was drawn out. Filters should only be constructed upon scientific principles, and only by those who knew something of the life-history of micro-organisms. The best filter which is used in science now is made of porcelain partly filled with shell-sand, and even these could not be safely used for a week unless the sand was sterilised, as the bacteria propagated rapidly. In dealing with large quantities, such as for the supply of communities, it is best to allow the water to stream slowly through the sand beds. Over these beds the bacteria form in a weedy gelatinous substance, and prevent other organisms from filtering through if the water passes slowly; but if the stream is rapid, the bacteria already on the beds are carried along, and, of course, multiply those that already exist in the water. Professor Boyce gave numerous interesting details as to the life of bacteria under varying conditions, and showed illustrations by limelight.

Mr. HERBERT E. DAVIES, B.Sc., F.I.C., said that he was not surprised to hear Professor Boyce make the usual allusion to the "mere chemical analysis" of water and its inability to detect pollution, but he was surprised to hear him instance the Worthing case as a triumph for bacteriology. Mr. Davies maintained from facts which he submitted that the bacteriologists had failed to show that the Worthing water was bad from their point of view. Mr. Davies further pointed out that in many cases the analysis of water failed to detect pollution, not on account of the inadequacy of

chemistry, but on account of the incompetence of the chemist, and said that this was not to be wondered at when medical officers of health were thought to be able to analyse water. He knew cases where the chemical experience was gained by two or three weeks' examining in a laboratory before the examination for the diploma. He maintained that with a competent analyst pollution could be detected in all but the most exceptional cases, while the bacteriologist only succeeded in the most exceptional cases, and then only after it was too late.

Mr. A. C. ABRAHAM said that he had intended to allude to the Worthing case which Mr. Davies had so well dealt with, but confined himself to a quotation from a paper by Dr. J. C. Thresh dealing with the same point. Mr. Abraham asked whether the Berkefeld filter would require sterilising so frequently as mentioned if it were employed without pressure or a suction-pump.

The PRESIDENT said that the paper was a most valuable one, and calculated to be of great service to all who had to deal with the analysis of water.

Professor BOYCE, in replying, indicated that he had no intention of claiming absolute perfection for the bacterial analysis of water. Bacteriology was as yet only in its infancy. He thought that the analysis of water should be a combination—both chemical and bacteriological—in order to secure the best results.

LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.

AT the meeting held on Thursday evening, February 20, the PRESIDENT (Mr. T. S. Wokes) gave a demonstration of suppository-making by the cold process, using the machine described and figured in the *C. & D.*, January 27, 1894, page 130.

Mr. R. H. MITCHELL submitted a prescription which he had to compound recently, viz.:—

Ferri et quinae cit...	..	..	..	gr. 80
Croton chloral hyd.	..	..	..	ʒiss.
Tinct. gelsemii	..	..	..	ʒij.
Aque ad	..	..	..	ʒviij.

Misce.

The croton chloral induced a thick precipitate to fall which settled on the sides of the bottle in a solid mass. By the use of mucilage, rubbing it with the croton chloral, and then adding the iron and quinine dissolved in half of the water, a good mixture was obtained. Some pills of 2½ gr. each valerianate of zinc and extract of henbane, when made up by Mr. Mitchell, became very soft, and took a large quantity of absorbent powder to mass them. It was suggested that Mr. Mitchell should use a dried extract of henbane.

Issue peas made of immature orange fruit were shown by Mr. PICKERING as somewhat of a curiosity nowadays.

An address by Mr. F. C. LARKIN, F.R.C.S., was then delivered upon "Facts," in the course of which the lecturer explained that what was looked upon as a fact by some people was quite a different thing to others, and then proceeded to give an interesting explanation of the means by which impressions are conveyed to us by our various senses.

PLYMOUTH AND DISTRICT CHEMISTS' ASSOCIATION.

ANTI-CUTTING.

AT a special meeting of the above, held on February 20, the SECRETARY announced that notices had been forwarded to all registered chemists in the district between Torquay and Penzance, requesting their attendance at a meeting to be held on Wednesday next, when an important discussion on the "anti-cutting scheme" will take place. The Secretary and other members of the Proprietary Articles Trades Association will attend to explain the principles and objects of the scheme.

THE EARLY-CLOSING BILL.

A resolution, passed at a former meeting, was forwarded to Mr. Kearley, M.P., who is backing Sir J. Lubbock's Early-closing Bill, to the effect that the Association wished to be included in the Bill, provided that a clause be inserted allow-

ing them to supply medicines only in cases of emergency after the stipulated hours.

REMEMBERING THE LADIES.

It was announced that the meeting to be held on April 1 next would be a ladies' evening. Chemists are invited to bring their lady friends to hear Mr. Doble's experiences in South Africa.

AFTER THE BALL.

As a sequel to the recent pharmacy ball, the committee and their friends dined at the Liberal Club, Plymouth, on February 19, when the Secretaries (Messrs. H. O. Westcott and F. Maitland) were complimented on the success of their efforts.

CAMBRIDGE PHARMACEUTICAL ASSOCIATION.

At a meeting of the Association held on February 21, Mr. Alderman Deck in the chair, Mr. ARTHUR S. SHRUBBS, of the University Herbarium, read two papers. The first was on "Ancient and Mediæval Materia Medica." The author quoted a number of quaint recipes from old herbalists, and also gave specimens of some of their extraordinary errors. He mentioned particularly the barnacle or goose tree, which was supposed in the sixteenth century to have brought forth little living creatures which, dropping into the water, gave rise to feathered fowls. His second paper was on "The Medicinal Plants of Cambridgeshire," a number of which he showed as herbarium specimens. He mentioned their various medicinal properties and some of the diseases for which they were used. The lecturer was cordially thanked for his papers.

MIDLAND CHEMISTS' ASSISTANTS' ASSOCIATION.

At the meeting held on Wednesday, February 19, Mr. H. JESSOP continued his observations upon

COAL IN RELATION TO PHARMACY,

confining himself on this occasion to the distillation of tar and the utilisation of its products. An average coal yields, on distillation, for every 100 lbs., 22½ lbs. of gas, 8½ lbs. of tar, 9½ lbs. of ammonia-water, and 59¾ lbs. of coke. The composition of the tar varies with the nature of the coal, the temperature of distillation, &c. As it comes from the gasworks it always has more or less water in suspension, to free it from which it is pumped into large iron tanks and allowed to stand for some time, when the water rises to the top and is pumped off. This liquid often contains a fair percentage of ammonia compounds. The tar is then run off into enormous stills, and subjected to a steam-heat, whereby water-vapour, ammonia, permanent gases, and the more volatile constituents pass over and are collected as "first light oils." A 1,200-gallon charge yields 70 gallons of this, about a half of it being naphtha, and the rest water containing various substances in solution. The heat is now increased, because the still has almost ceased working, little else but water-vapour passing over for about an hour, and as the temperature rises the still comes off the "rattle" (the peculiar noise made by the water-vapour issuing), and about 20 gallons of an oil lighter than water are collected. The temperature is now continually being raised. After a short time an oil which is heavier than water is being collected; when this occurs the shoot (or receiver) is changed, and the first heavy oil is collected separately. This oil distils for about three hours, and about 300 gallons are distilled off. The first portion consists chiefly of naphthalene, so that considerable care must be exercised in order to prevent the worm of the still becoming blocked. The second portion of the distillate is called "sharp soft oil"; the naphthalene which distils over now is wholly soluble in the oil running. When the oils begin to thicken, the shoot is again changed, and the still is said to be on the anthracene oil, of which about 50 gallons are collected. The fire is then drawn, and the still cooled. The residue is pitch.

As to the composition of the fractions, the oily portion of the "first light oils" is fractionated, and what passes over below 80° C. is often sold as naphtha for dissolving rubber, &c. The next fraction (between 80° and 115° C.) is commercial benzene. The portion remaining in the still

is added to the second light oils, which are washed with hydrochloric acid, then with water, next with a solution of caustic soda, and again with water. These washings are put aside and used for the manufacture of carbolic acid. After this washing the oil is fractionated; that passing below 140° C. is added to another batch of first light oils, that passing between 140° and 190° C. being collected. The first portion of the heavy oil is used to prepare naphthalene, and the second portion (together with any other oils which are unworkable) is sold to railway companies for creosoting timber sleepers, telegraph-poles, &c., to prevent decay and the attacks of insects.

The anthracene oil has of late years become very valuable on account of the artificial production of alizarin from anthracene. The anthracene is extracted by a system of cold and hot pressing, subliming, and condensing. In this condition (yellow flakes) it is sold to the colour-maker, who converts it into alizarin.

The crude benzene obtained from the first light oils contains also toluene, of some interest to pharmacists on account of its being also contained in "dragon's-blood" and tolu balsam; and the fact that this substance is the one from which saccharin is prepared. The benzene is obtained pure by re-distillation at about 80° C.

Aniline is obtained by allowing a mixture of nitric and sulphuric acids to slowly trickle into a cylinder of benzene, the cylinder being constantly rotated. When the nitration is complete the cylinder is allowed to stand, when the nitrobenzole rises to the top and is drawn off, washed with water, then with caustic-soda solution, and finally with water. The purified nitrobenzole is now converted into aniline by nascent hydrogen, by adding it to hydrochloric acid and iron trimmings. On distillation the aniline passes over and condenses as a colourless liquid, which rapidly changes colour, and solidifies at a low temperature.

For the preparation of carbolic acid from the washings the soda solution is treated with hydrochloric acid, when the carbolic acid rises to the surface, is treated with chloride of calcium to deprive it of water, distilled, and redistilled, when a crystalline mass of pure carbolic acid is collected, melting at about 33° and boiling at 188° C.

Incidentally the author described several of the by-processes connected with his subject, and at the conclusion several of the members spoke.

EDINBURGH CHEMISTS', ASSISTANTS', AND APPRENTICES' ASSOCIATION.

At the meeting held on Friday, February 21, Mr. W. B. COWIE gave an interesting lecture, fully illustrated by diagrams and drawings, of the systems of reproduction in a fern, a pine, and an ordinary flowering plant, the homologous parts of each being compared. He also exhibited under the microscope and described the prothallus of a fern.

The next communication was on "Landmarks in the Progress of Organic Chemistry," by Mr. G. G. DAVIDSON. The author referred to the synthesis of urea by Wöhler and Liebig, and dealt especially with the employment of electricity in the production of calcium carbide and the use of the latter in the production of acetylene.

Mr. COWIE then demonstrated the combustion of common air in the atmosphere of coal-gas, and *vice versa*, by means of the glass lamp-chimney. The lower end of the chimney was closed with a cork, perforated so that two glass tubes passed through it. One tube was connected with the gas-supply, and the other admitted air. On lighting the gas and admitting sufficient air the chimney became filled, and the flame passed from the gas-pipe to the air-pipe, thus showing combustion of air in coal-gas. The excess of gas could be lighted at the upper end of the chimney. On reducing the supply of gas, the air again predominated, and the flame passed back to the gas-pipe.

ULSTER PHARMACEUTICAL ASSOCIATION.

A MEETING of this Association was held on February 20, in the "I.O.F." Chambers, Belfast, Mr. P. J. Lyons (Vice-President) in the chair.

Mr. G. CAMLIN, M.P.S.I., read a paper entitled

How to Do it.

The author said he had for some time past noticed a disposition on the part of patent-medicine manufacturers, wholesale merchants, and retail traders to develop a system of fair prices for their goods, and to defeat the "cutters." He believed they were all in sympathy with this movement.

"Cutting" the prices of patent medicines did not originate amongst chemists, but with drapers and grocers, who, wishing to get a share of the big profits which the public believed chemists were making, and in order to induce the public to purchase such goods from them (the drapers and grocers), offered them at reduced prices; the chemists, finding their trade in this department falling, went one better by making further reductions. Others followed suit, and so the profits were cut finer, until at present the sale of patent medicines is as money-making as selling postage-stamps.

Having shown the necessity for considering all sections engaged in the trade—manufacturers, wholesale dealers, and retailers—and ensuring to each a fair remuneration, Mr. Camlin said suggestions for preventing cutting had been many, but few of them were, to his mind, entirely practicable. The majority err in necessitating a system of "boycotting," a course of action which would prove in the long run a cure worse than the disease.

The suggestion that all patent medicines should be sold at full prices was, he feared, impracticable, because it would be necessary to have the support of all retailers everywhere, which could not be hoped for. It had also been proposed that provincial chemists' associations should first draw up a list of firms whose goods had the largest sale in their district, then petition those firms to sell only to dealers who had signed an agreement to maintain prices, and, lastly, give those who agreed a special discount.

At present it is the makers who get the greatest profits. Let them decide on a minimum cutting-price, such as Messrs. Elliman's or the Vinolia Company's schemes, which have been in force for some time and found to work well. If a fair living profit was secured to the retailer, substitution would not be so frequent as it now is. Cutting has proved a great blessing to many chemists, who have found that a large percentage of their sales comes from patents, and they develop a good business in their own articles which cannot be taken from them by cutters. He recommended chemists not to give a foot of space they are paying rent for to pushing business which does not pay them, nor to use handbills supplied free to wrap up small articles. Why not get circulars mentioning their own proprietaries? He recommended as a practicable and easily-worked scheme: (1) That manufacturers be asked to sign an agreement to the effect that they would not supply direct to retailers, but only to those wholesale firms who have signed an agreement fixing a minimum price; (2) that wholesale firms should in turn demand a similar agreement from their customers, the supplies to be stopped whenever the infringement of such agreements was proved. It was also essential to ask manufacturers to supply their goods to chemists only, for, no matter how good the scheme might be, unless grocers and others were prevented from getting patents at the same price as chemists, the result hoped for would never be attained. This scheme might seem to savour of boycotting, but what is good for many must surely be good for a few. The manufacturers would be ensured of the co-operation of chemists, the wholesaler would be better off than now, as all the trade would go through his hands, the retailer would know he was sure of a certain profit, and the purchaser would get the genuine article, even though he had to pay a little more for it.

A discussion followed, in which Messrs. AGNEW, ALLAN, MOORE, ELLIOTT, and MCKNIGHT took part, and it appeared that the opinion was generally held that something should be done to stop the systematic cutting in prices. Accordingly it was proposed and unanimously agreed to that a deputation, consisting of Messrs. Lyons, Elliott, and McKnight, be appointed to wait on the pharmaceutical chemists of Belfast and vicinity to obtain their opinions as to the formation of an anti-cutting union, and to report to the Association.

Mr. AGNEW read a paper entitled "Some Experiments

with Ammonia and Nitrogen," illustrated with lantern-views, which proved interesting and instructive.

The SECRETARY announced that a social meeting of the Association would be held on Tuesday evening, March 3, and that Herr Werner had kindly consented to take charge of the musical programme.

BRADFORD AND DISTRICT CHEMISTS' ASSOCIATION

ON February 19 an address on "Poisons" was delivered by Mr. Silson. Mr. MacRay (President) was in the chair, and the attendance numbered between twenty and thirty. Mr. SILSON specially mentioned carbolic acid as the poison by which more deaths were caused than by any other, and he expressed the opinion that it ought to be placed on the schedule. A lively discussion ensued.

Trade Notes.

A BRONZE medal was awarded to Jeyes' Sanitary Compounds Company at Cruft's Dog Show, Agricultural Hall, Islington.

MESSRS. WILLIAM EDWARDS & SON, of 157 Queen Victoria Street, E.C., have just issued their catalogue of proprietary medicines and druggists' sundries for 1896. The latter section is illustrated, and all articles are quoted at net prices.

KRESOCHINE is a new disinfectant and deodorant which Mr. B. Kühn, 36 St. Mary-at-Hill, E.C., is introducing. It is a liquid compound of cresol and chinoline, of syrupy consistency, amber colour, and not disagreeable odour. In the last-mentioned characteristic it resembles some of the cresol disinfecting fluids already in the market, but, unlike them, it dissolves in water to form a clear solution, which is not made milky by the addition of acids. Judging from the nature of the compound and the tests which it has been put to, it appears to us to be a true disinfectant, and one of exceptionally wide application. Mr. Kühn will supply anyone who wishes to hear more of it with a description of its uses, and samples. We may add that kresochine is not, like carbolic acid, a corrosive poison, yet it appears to be four times stronger as a bactericide. It covers bad smells, on the whole, better. Mr. Kühn asks us to state that he can send a copy of the pamphlet on exalgine, referred to in these columns recently, to anyone who asks him for it, and a sample of the drug along with it.

Business Changes.

Notices of changes in the retail trade, and opening of new businesses, are inserted in this section, free of charge, if properly authenticated.

MR. W. K. INGLIS, chemist, Delph, near Oldham, having been appointed postmaster, has removed to more central premises.

MESSRS. WM. DROEGE & CO. have removed from 194 Upper Thames Street, E.C., to No. 14 Upper Thames Street, E.C.

MR. BISHOP's branch business in Sandgate Road, Folkestone, was sold to Mr. F. G. Curtis, pharmaceutical chemist, of Ealing, not to Mr. D. L. Lewis as erroneously stated last week. Mr. N. T. Frost has purchased Mr. Curtis's Ealing business.

MR. T. W. JONES, of the Bohemia Pharmacy, 71 Bohemia Street, St. Leonards-on-Sea, wishes us to correct the statement that Mr. C. C. Ross had sold to him that business. We find that Mr. Ross in his circular stated that Mr. Jones had purchased his (Mr. Ross's) interest in the business.

AUSTRIAN PHOSPHORUS MATCHES. — The Austrian sanitary authorities have considered the propriety of allowing matches to be made with yellow phosphorus, and have proposed to make this practice illegal and to substitute red phosphorus, although many industrial difficulties stand in the way.

Legal Reports.

THE YORKSHIRE RELISH CASE.

IN the Court of Appeal from February 20 to February 25, Lords Justices Lindley, Kay, and Smith had before them the case of Powell (Goodall, Backhouse & Co.) v. the Birmingham Vinegar Brewery Company (Limited), the defendants appealing from a judgment of Mr. Justice Stirling. The plaintiff in this action sought an injunction to restrain the defendants offering sauce not of his manufacture as the sauce of the plaintiff by the use of the term "Yorkshire Relish" or in any other way. The plaintiff had, according to his case, manufactured Yorkshire Relish for thirty-five years and had spent 400,000*l.* in advertising it. In 1894 the defendant company produced and put upon the market a sauce with a label bearing the words "Yorkshire Relish" in large capitals, and the plaintiff contended that this constituted a fraudulent imitation of his sauce and was likely to deceive. His Lordship in the course of his judgment came to the conclusion that the words "Yorkshire Relish" were a fancy term and not descriptive, and he granted a perpetual injunction with costs. From that judgment the defendants now appealed.

Mr. Buckley, Q.C., in support of the appeal said this action was the sequel to previous litigation in the matter. On the application of the Birmingham Vinegar Brewery Company Mr. Justice Chitty had made an order expunging the words "Yorkshire Relish," which were the trade-mark of the plaintiff's sauce, from the trade-mark register. This order deprived the plaintiff of the right to the exclusive use of the words "Yorkshire Relish." Both the Court of Appeal and the House of Lords confirmed that decision. Then the defendants brought out their sauce. The bottles bore the words "Yorkshire Relish," but the labels of the competing sauces were different in get-up, and it was not contended that one could be mistaken for the other. In that state of facts Mr. Justice Stirling was asked to grant an interlocutory injunction. He did so, and the Court of Appeal confirmed the decision. After that the defendants sought to make their labels more distinctive than ever.

Lord Justice Kay: No one asserts, I suppose, that the constituents of the two sauces are identical.

Mr. Buckley said there was a great deal of evidence upon that. The analysts on both sides came to the conclusion that, as regarded the consumer, nobody could tell the difference, but that an expert might with difficulty discriminate between them, the defendants' sauce being perhaps a trifle more salt than the plaintiff's.

Lord Justice Kay: Do not the defendants want to avail themselves of the reputation gained by the plaintiff?

Mr. Buckley: They want to sell Yorkshire Relish. The plaintiff seeks to protect the words "Yorkshire Relish," and he wants to maintain them upon the ground that "Yorkshire Relish" is a fancy name.

Mr. Buckley, Q.C., and Mr. Moulton, Q.C., having concluded their arguments in support of the appeal, Mr. Graham Hastings, Q.C., submitted that the learned Judge below was right in the decision he had given. The defendants, he contended, had done all they possibly could to lead people to believe that their "Yorkshire Relish" was manufactured by the plaintiff. The defendants were no novices in the art of imitation, for their manager had admitted, in cross-examination that they had imitated the labels of Lea & Perrin's Sauce and Eno's Fruit Salt. Another point was that when the defendants first put "Yorkshire Relish" upon the market they did not distinguish it in their price-list as being of their own manufacture, but simply designated it "Yorkshire Relish." That to an ordinary mind would convey the idea that what they were selling was the well-known "Yorkshire Relish" of the plaintiff. The learned Judge had not based his judgment upon deliberate intention to deceive on the part of the defendants; but he held that what they had done enabled, as he (Mr. Graham Hastings) contended, the dishonest grocer to palm off the defendants' goods when he was asked for that which *prima facie* meant the plaintiff's. A grocer selling the defendants' "Yorkshire Relish" would obtain a greater profit than if he sold the relish manufactured by the plaintiff, and it was only natural that when asked for "Yorkshire Relish," he

would in preference sell that which yielded the highest profit. On the whole facts of the case he asked their Lordships to come to the conclusion that the defendants put their relish upon the market with the intention of passing off, or enabling others to pass off, their goods as the goods of the plaintiff.

Mr. Buckley replied at length, and their Lordships in the end reserved judgment.

THE PHARMACY ACT.

SALE OF POISON BY AN UNQUALIFIED ASSISTANT.

AT the Liverpool County Court on February 25, the Pharmaceutical Society of Great Britain sued J. Bainbridge, a chemist's assistant employed at the Park Lane Pharmacy, to recover the statutory penalty of 5*l.* for an alleged offence against section 15 of the Pharmacy Act, 1868. Mr. T. R. Grey appeared for the Society; the defendant conducted his own case.

Mr. Grey said the action was to recover a penalty for the unlawful sale of a poison by the defendant in November last, the poison sold being a preparation containing opium. Opium was included in the schedule to the Pharmacy Act. The provisions of that Act absolutely excluded all persons from selling poisons unless they had passed an examination under the Pharmacy Act. Section 13 of the Act made the register, which he now put in, proper evidence—that was to say, if the defendant's name did not appear in that register it was evidence against him that he was not qualified unless he could prove to the contrary. The penalty provided for by the Act in the case of an unqualified person selling poison was 5*l.* Counsel then cited a case decided in the Queen's Bench Division, where it was held that if an unqualified chemist's assistant sold poison he was liable to the penalty, notwithstanding that he effected the sale on behalf of his master, and that his master was duly registered.

The Registrar (to Defendant): You admit your liability, do you?

The Defendant: Yes; I admit selling the poison.

The Registrar: And you admit that you were not qualified?

The Defendant: Yes, sir.

Judge Shand: That is sufficient. The penalty is 5*l.*

Mr. Grey: Yes; but we have had to bring our witnesses down here, as we had no intimation of the admission. We have the analyst from London, and another witness.

Judge Shand: Then that will be two witnesses from London.

Mr. Grey: And one from Manchester.

Judge Shand: Very well.

Mr. Grey: I have also to ask for counsel in this case.

Judge Shand: Very well. (To Defendant.) What is your position?

The Defendant: My salary at the Park Lane Pharmacy is very small. I have only 10*s.* 6*d.* a week.

Judge Shand: Judgment for the plaintiffs for the full penalty and costs, to be paid at 4*s.* a month.

[IS IT A PREPARATION OF STRYCHNINE?]

AT Tenbury, on February 17, Geo. Turley, of Teme Street, was summoned for keeping open a shop for the retailing of poisons, not being a duly qualified pharmaceutical chemist or chemist and druggist, and with selling a preparation containing strychnine without labelling the bottle or cover with the name of the article and the word "Poison," and with the name and address of the seller. Evidence of the alleged purchase of strychnine from the defendant having been given, the Bench adjourned the case until March 17 for the production of evidence to show whether the article sold was strychnine.

SALE OF FOOD AND DRUGS ACT.

SEIDLITZ-POWDERS.

AT West Bromwich Police Court on Monday, before Mr. Neville (Stipendiary), John Salmon Mould, trading in High Street, West Bromwich, as the Wolverhampton Drug-stores, was summoned, at the instance of the West Bromwich Corporation, for selling seidlitz-powders on December 17, 1895,

which Mr. A. Caddick (Town Clerk), who prosecuted, said were not of the nature, substance, and quality demanded. Mr. Vachell appeared for the defence.

Elizabeth Dutton, assistant to the Inspector, stated that on December 17 she visited the defendant's shop and asked for six seidlitz-powders. She was told that she could have a dozen for 4½d., and she agreed to purchase that quantity. She handed the powders to Mr. Davies (Inspector), who entered the shop at the time. In reply to Mr. Vachell she said the powders were in a box, upon which was printed "Genuine seidlitz-powders, full strength, made according to the British Pharmacopœia formula." After the directions followed the words (printed in red ink)—"These powders are measured as near correct weight as possible. They are not guaranteed the weights stated in the British Pharmacopœia."

Mr. Davies (Inspector) said that one-third (four) of the powders were handed to the Borough Analyst. In reply to Mr. Vachell, the witness said he did not complain of the quality, the nature of the ingredients, or of the introduction of any foreign ingredients; it was simply a question of weight as given in the British Pharmacopœia. He divided the sample purchased into three lots; one-third portion he handed to the defendant, and another to the analyst, whilst the third portion was retained.

Mr. Vachell suggested that it would have been better to have mixed the powders into one bulk and then divided it. (To Witness.) Do you know that seidlitz-powder was an article of commerce long before the British Pharmacopœia was even dreamt of?—No, sir. I understand that some of these powders are a grain or two short?—Yes.

Mr. Vachell said if customers liked to have the powders weighed nicely in scales they were 8d. per box. In the first edition of the British Pharmacopœia seidlitz-powders were not mentioned. They existed and were sold long before that work appeared.

The Stipendiary: We will not go back to the year 1.

Mr. Vachell: We might almost go back as far as that for seidlitz-powders. The British Pharmacopœia published a description of them for the first time in 1890, and chemists had always made up two classes of powders.

The Stipendiary: Do you suggest that this is not the necessary way of making up the seidlitz-powders?

Mr. Vachell: The British Pharmacopœia is not the standard for seidlitz-powders which people are bound to sell. (To Inspector Davies.) Do you know, Mr. Davies, that chemists throughout the country sell two kind of seidlitz-powders?—No, sir.

Harry Silvester, Borough Analyst, deposed to making the analysis. He said the average deficiency of the powders in the blue papers was 9.1 gr., and the excess in the white papers was 3½ gr. He did not examine each packet separately. He mixed them into one bulk, and having done that analysed it.

Mr. Vachell: Are the proportions of tartaric acid and bicarbonate of soda the same as in the British Pharmacopœia?—Yes. So that these powders are exactly of the same nature, quality, and substance as prescribed in the British Pharmacopœia?—Yes. But not the same quantity? Yes.

Arthur Winterbottom, who said he had been a qualified chemist for three years, said the proper course was to weigh and not measure the seidlitz-powders. Measuring had not been generally practised since 1890. He was proceeding to explain the composition of the powders when

The Stipendiary said he thought they should accept the standard of the Pharmacopœia.

Mr. Vachell: Are there not two ways of making up these powders adopted through the trade?—Not since 1890. Chemists ought to weigh everything. Are you in the employ of a rival shop?—I am in the employ of a chemist in the town.

Mr. Caddick: If there was more of one sort than another it might be attended with serious results?—Yes.

Mr. Vachell, in defence, first submitted that the sample had not been dealt with in the manner prescribed by the Act, which made special provision for the protection of the defendant. The prosecution had divided the sample in such a manner as to defeat the object of the Act. There was no complaint of adulteration. The defendant was prosecuted under section 6, which provided for cases of two sorts—one being cases where there had been adulteration, and the

other where the quality of the article was so poor that it was found to be deficient in some degree.

The Stipendiary said he was against the prosecution in regard to the manner in which the samples had been divided. If he had to send these other four samples to Somerset House, it could not be proved whether the analysis of the first four samples was right or wrong. It was no use to proceed any further.

Mr. Caddick: My object is attained if the defendant will in the future proceed according to the British Pharmacopœia.

Mr. Vachell: The defendant does not intend to alter his course of business or his practice in that respect.

The Stipendiary said he considered that the British Pharmacopœia was the standard.

Mr. Vachell: The question is whether an old-established powder like this cannot be sold at popular prices with the proper ingredients.

The Stipendiary thought any previous system of making up those powders must have been superseded by the formula given in the British Pharmacopœia. The summons was dismissed.

At the Isle of Wight County Petty Sessions, on February 15, Hopkin Gibbon, shopkeeper, Lake, was summoned for selling adulterated seidlitz-powders. Six packets of the powders were purchased at defendant's shop, and the public analyst certified that the white packet contained 26.2 gr. of tartaric acid instead of 38 gr., as prescribed in the British Pharmacopœia. The blue packet contained 149.8 gr. instead of 160 gr., and was a mixture of 97.4 gr. of Rochelle salts and 52.4 gr. of bicarbonate of soda instead of 40 gr. of bicarbonate and 120 gr. of Rochelle salts. Defendant, who pleaded not guilty, stated that the powders were obtained from Messrs. Caplen, Wooldrige & Co., of Southampton. The Bench expressed the opinion that the mere fact that the words "Improved Seidlitz-powder" were on the packets did not free defendant from liability. In the present case the word "improved" was a delusion, but they thought justice would be met by a fine of 1s. and costs.

SWEET SPIRIT OF NITRE.

ON Monday, at West Bromwich Police Court, before the Stipendiary (Mr. Neville), Thomas Freeman, of Walsall Street, West Bromwich, was charged with selling 6 oz. of sweet spirit of nitre which upon analysis was found to be 75 per cent. below the proper standard. Defendant said according to the invoice the sweet nitre was pure. The Stipendiary said an invoice was not sufficient guarantee. Defendant pleaded that owing to the quick way sweet nitre evaporated it was impossible for him or anyone else to keep it up to its proper state. The Stipendiary fined defendant 4l. 12s., including costs, and reminded him that in the future sweet nitre must not be sold in an evaporated state.

COUNTY COURT CASES.

AN ALLEGED RUPTURE-CURE.

AT the last sitting of the Manchester County Court, before Judge Parry, Edward Jones, farm labourer, sought to recover 22l. 1s. from Samuel J. Sherman, 64 Chancery Lane, London, described as a quack doctor. Mr. Langdon, barrister, whose statement was confirmed by the plaintiff, said that the plaintiff, who lived at Rhosddigre, Llandegla, near Mold, in April, 1894, attracted by an advertisement in a North Wales paper, was induced to put himself in the hands of defendant, who had proclaimed his ability to cure ruptures without operation. He went to Manchester, and saw defendant. Before any examination of him was made he had to put down 1l. 1s. Then Sherman examined him, and undertook to cure him for 20 guineas, which sum plaintiff paid. After the lapse of a few weeks the plaintiff lost faith in defendant and in the virtue of his "scientific and unique appliance" and the curative compound known exclusively to defendant, and desired to have his money back. Mr. W. Whitehead, surgeon, Manchester, gave evidence that it was a matter of common knowledge to medical men that rupture in an adult was not curable without operation. The plaintiff said that

while he was in Sherman's company Sherman said he would make him able to pitch hay again, and also showed him pictures of men who had suffered from rupture and had been cured by him. The Judge gave judgment for the full amount claimed, with costs, including costs of two medical witnesses, and directed that there should be immediate execution.

RETAILING PURE METHYLATED SPIRIT.

At Glasgow Justice of Peace Court on February 21, John Shaw, Craig & Co. (Limited), licensed retailers of methylated spirit, Paterson Street, were charged with having, on January 8, sold to Edward Dyson, officer of Inland Revenue, methylated spirit in which mineral naphtha had not been dissolved. A representative of the firm pleaded not guilty.

Mr. Dyson said he was supplied with a bottle containing 5 gills of methylated spirit, paying $1\frac{1}{2}$ d. a gill and 1d. for the bottle. When tested by the addition of water, as he showed to the Court, the spirit did not change to a milky colour as it did when mineral naphtha had been added. An employé of the firm said that Mr. Dyson came into the place "a howling swell"—(laughter)—and, although witness was not authorised to sell methylated spirit, he sold him some. At that time he did not know it was necessary that the spirit should be mineralised before being retailed. Another employé said that Mr. Craig instructed him not to sell methylated spirit without mixing it with naphtha or rosin varnish.

The Supervisor of Inland Revenue, who prosecuted, said that formerly chemists, especially in Glasgow, mixed methylated spirit with peppermint to disguise the disagreeable taste, and it was sold for drinking purposes, especially on Sunday, when people could not get whisky. It used to be extensively used as a beverage in Glasgow, and the Court would therefore see how necessary it was to prevent the sale of it in a condition in which it could be drunk. The Commissioners of Inland Revenue had issued an order that it must not be retailed unless mixed with mineral naphtha, which made it unpalatable. He did not press for the full penalty of 50/.

An agent stated for the respondents that altogether they had only sold five half-gallons of the spirit, and all for trade purposes. The lad was induced to sell this quart because of the respectable appearance of the buyer.

The Magistrates said that considering the great harm which had been done in Glasgow by the sale of pure methylated spirit, the Court thought the Inland Revenue had done a proper thing in bringing the case into court. The prosecutor did not press for a heavy penalty, and the fine would be modified to 5/.

Bankruptcy Reports.

Re ARMSTRONG WILLIAMSON, 32½ Trimdon Street, Sunderland, Patent-medicine Vendor.

THIS debtor made an application for his discharge at the Sunderland Bankruptcy Court on Thursday last. It appeared from the Official Receiver's report that the debtor's assets were not equal to 10s. in the pound, and that he had not kept proper books of account; that he had continued in business after becoming aware of his insolvency, and that he had contracted debts without having any reasonable or probable ground of expectation of being able to pay them. Eventually his Honour suspended the debtor's discharge for two years.

Re G. T. ARCHIBALD, Workington, Chemist.

THE Official Receiver of the Carlisle Bankruptcy Court reports that Mr. Archibald, against whom a receiving order has been made on a creditor's petition, has written to him stating his intention to leave the country. Mr. Archibald also states that before the petition was filed he had intended to take that course, and had executed a deed of assignment for the benefit of his creditors. His motive for leaving was the interests of his wife and large family, and not out of any disrespect for the authorities, while he gives as the cause of his failure "certain property standing long empty."

Deeds of Arrangement.

Childe, R., & Co., Beehive Shed, Longside Lane, Bradford, manufacturers (partners, Rowland Childe, Drightlington, and John Arthur Melton, late of Drightlington, now residing at Cape Town, South Africa, chemist). Trustee, William Claridge, Market Street, Bradford, accountant. Dated, February 17; filed, February 18. Secured creditors, 2,334/ 10s. 11d.; liabilities unsecured, 2,942/ 8s. 10d.; estimated net assets, 2,069/ 8s. 7d. The following are scheduled as creditors:—

	£	s.	d.
Aked, G. H., Bingley	171	0	0
Allen, A., & Co., Bradford	107	0	0
Aykroyd, Mitchell & Co., Liversedge	68	0	0
Beanland, R., & Co., Bradford	86	0	0
Boltonian Spinning Company, Bolton	118	0	0
Briggs, J., Bradford	361	0	0
Childe, J. B., Bradford	200	0	0
Childe, Misses, Low Moor	150	0	0
Childe, Mrs.	150	0	0
Dawson, M., & Son, Bradford	102	0	0
Feather Brothers, Halifax	22	0	0
Hodgson, J. & W., Bradford	96	0	0
Melton, Mrs., Drightlington	150	0	0
Smith, S., Bradford	453	0	0
Stott & Ingham, Greetland	331	0	0
Walter, H., & Co., Brighouse	227	0	0
Bankers' claims	£,433	0	0

Donbavand James, Market Street, Dewsbury, chemist and druggist. Trustee, Joseph Croft, Dewsbury, accountant. Dated, February 14; filed, February 19. Secured creditors, 423/ 2s. 2d. Liabilities unsecured, 442/ 16s. 11d.; estimated net assets, 130/ 3s. 10d. The following are scheduled as creditors:—

	£	s.	d.
Broadbent, Tom Webster, Earlsheaton	23	0	0
Donbavand, Sarah Jane, Batley Carr	22	0	0
Donbavand, Betsy, Batley Carr	21	0	0
Grunwell, H., Leeds	13	0	0
Lister, Mrs., Ecclehill	113	0	0
Lord, Joseph, Cloughton	97	0	0
Ward, Abraham (Exors. of), Dewsbury	290	0	0
Ward, James (Exors. of), Dewsbury	50	0	0
Woolley, James, Sons & Co. (Limited), Manchester	27	0	0
Yates, Samuel, Manchester	61	0	0
Bankers' Claims	61	0	0

Gascoigne, Charles, 213 Kentish Town Road, chemist. Trustee, George E. Thompson, 13 Woronzow Road, St. John's Wood, printer. Dated February 21; filed, February 25. Unsecured liabilities, 983/ 5s. 6d. Estimated net assets, 150/. Composition of 2s. in the pound, payable by two equal instalments at 3 and 4 months from date hereof, secured by trustee, with an assignment to him upon trust, &c. The following are scheduled as creditors:—

	£	s.	d.
Bassett, Sydney, London	58	0	0
Brett, F. J., Leicester	17	0	0
Davy, Yates & Hicks, London	85	0	0
Gascoigne, Isabella, Whitby	£21	0	0
Gascoigne, J. R., Darlington	25	0	0
Maw, Son & Thompson, London	21	0	0
Sanger & Sons, London	50	0	0

Gazette.

PARTNERSHIPS DISSOLVED.

Hartley, R., and Ferguson, A. C., surgeons, Thirsk.

Sewell, H. G., and Ettles, J., jun., Herne Bay, mineral-water manufacturers.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

Wood, John Cundell, Sunderland, surgeon.

ADJUDICATIONS.

Archibald, George Tomlinson, Workington, chemist and druggist. Shorthouse, Neville, Sackville Street, Piccadilly, W., surgeon.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Stockman, Tom Sargent, the younger (described in receiving-order as Tom S. Stockman), Walbrook, E.C., chemical agent—discharge suspended for two years, ending January 21, 1898. (Public examination concluded February 2, 1892.)

New Companies and Company News.

WELL'S LIMELIGHT COMPANY (LIMITED).—Capital 1,200*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of limelight-manufacturers carried on by J. Wells & Co. (Limited), at Riversdale Works, Earlsfield, S.W., and St. George's Road, Southwark, S.E. Registered without articles of association.

PITT & NORRISH (LIMITED).—Capital 40,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers of and dealers in mineral and aerated waters and other beverages, bottlers, bottle-makers, brewers, &c. The first directors (to number not less than three nor more than five) are G. Norrish, W. W. Rogers, and T. H. Chance. Qualification, 100 shares. Remuneration, 50*l.* each per annum. G. Norrish is to act as the managing director, with a salary of 350*l.* per annum. Registered office, 28A Wharf Road, City Road, London, E.C.

DODD & CO. (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To carry on the business of chemists, druggists, dyers, salters, oil and colourmen, importers and manufacturers of and dealers in pharmaceutical, medicinal, herbal, chemical, industrial, and other preparations and articles, and makers of and dealers in proprietary goods. The first subscribers (each with one share) are:—Robert Pinder, 144A Brownlow Hill, Liverpool, pharmaceutical chemist; Wm. H. Cooke, Market Place, Huddersfield, printer; Mrs. W. H. Cook, 24 Fitzwilliam Street, Huddersfield; H. Pinder, 24 South Street, Huddersfield, stationer; C. F. Sarll, 24 South Street, Huddersfield, printer; J. Dodd, 44 King Street, Huddersfield, hydropathist; G. H. Cook, 88 Fitzwilliam Street, Huddersfield, assistant. Wm. H. Cook is to act as the governing director so long as he holds 50 shares. Registered office, 44 King Street, Huddersfield.

SMITH, POWERS, SIMSON, GEENENS & CO. UNITED (LIMITED). Capital, 100,000*l.*, in 10*l.* shares. Objects: To acquire, take over as going concerns, and carry on the following businesses of (1) varnish maker, carried on by Harold Smith at Coventry; (2) manufacturers of paints, varnishes, oils, colours, and chemical produce, and manufacturing chemists, carried on by Amédée Geenens and Joseph Simson as "Simson & Geenens" at Ghent, Belgium; and (3) paint, varnish, oil, colour, and chemical manufacturer and manufacturing chemist, carried on by Dr. Hugo Münzer as "Dr. Münzer & Floeck" at Homburg vor der Höhe, Germany; to enter into agreements with the said vendors, and to carry on business as chemists, druggists, dyers, salters, oil and colourmen, importers and manufacturers of and dealers in pharmaceutical, medicinal, chemical, industrial and other preparations, paint, colour, varnish, and chemical manufacturers and merchants, &c. The first subscribers (each with one share) are:—W. A. Colledge, Station Road, Foleshill, Coventry, clerk; J. J. Willdigg, Penrhyn, Foleshill Road, Coventry, clerk; J. Boustead, 77 Ashville Terrace, Coventry, clerk; E. J. Woodhead, 13 Jordan Well, Coventry, clerk; J. Davies, 41 Hood Street, Coventry, clerk; W. H. Moore, 9 Richmond Terrace, Coventry, clerk; J. Ashley, 13 Bishop Street, Coventry, auctioneer. The first directors (to number not less than two nor more than seven) are to be appointed by the subscribers. Qualification, 1,000*l.* Remuneration, as the company may decide.

H. BRONNLEY & CO. (LIMITED), soap-manufacturers, &c., whose registration we reported last week, wish it to be known that the conversion of their business into a limited company has been effected for private reasons, and that the capital has been taken up entirely by the partners and employés.

W. B. FORDHAM & SONS (LIMITED).—The directors report a gross profit on last year's trading of 24,807*l.* 17*s.* 3*d.*, and a net profit of 9,925*l.* 16*s.* 8*d.* An interim dividend of 7½ per cent. on the first half-year has been paid, and the directors now recommend a dividend on the second half-year of 12½ per cent., making a dividend of 10 per cent. on the year's business. This rate of profit has been divided for the past ten years, so that the original shareholders have now been repaid their investment.

THE annual meeting of the Civil Service Supply Association was held on February 26. Mr. R. Bannister, who presided, stated that during the past six months goods were bought to the amount of 758,850*l.*, and sold to the amount of 868,972*l.* The stock at the close of the half-year was valued at 304,417*l.*, and the net profit was 23,807*l.*, the working-expenses, including carriage, being 10*l.* 18*s.* 2*d.* per cent. of the sales. During the six months they sent out 476,529 packages. The business done was larger than in the corresponding half-year of 1894, but it appeared that the average purchases of ticket-holders were declining. In 1890 each purchaser bought goods to the value of 43*l.* 8*s.*, but during 1895 that figure had diminished to 33*l.* 3*s.* A dividend of 12*s.* per share was declared.

THE shareholders of Brunner, Mond & Co. (Limited) held their thirtieth half-yearly meeting at Liverpool on Feb. 21, Sir J. T. Brunner, M.P., presiding over a large attendance. The directors in their report recommended a dividend on the preference capital of 7 per cent. per annum, and a dividend on the ordinary capital of 30 per cent. per annum, carrying forward a balance of 95,677*l.* There was to the credit of profit-and-loss account on the working of the half-year ended December 31 162,502*l.* This, with 89,699*l.* brought forward from the previous half-year, made a total of 252,201*l.* In moving the adoption of the report the Chairman referred to the fact that the company had taken possession of the new works at Middlewich on August 1. The company had during the last half-year entered into an agreement with the United Alkali Company and Messrs. Bowman, Thompson & Co. They did not initiate the movement, but they considered they ought not to resist—in fact, they were bound to accept the proposals which were made to them. The prices of alkali were below the cost of production in most cases. They thought they should not raise the market prices so as to encourage undue competition in the future. Mr. H. Coghill seconded the motion, after which the Chairman explained, in answer to a shareholder, that the preference shares had been issued for cash, and part of the remainder had been issued for the purchase of the Middlewich works. He added, in reply to another shareholder, that the company were not limited to the make of the United Alkali Company. They might make and sell as much as they could without any limit. The report was adopted.

Trade-Marks Applied for.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," February 26, 1896.)

"MARATANA"; for chemical substances for use in medicine and pharmacy. By F. Keller, 489 Dumbarton Road, Partick, by Glasgow, chemist and druggist. 192,276.

"NOSBINE"; for chemical substances for use in medicine and pharmacy. By A. H. Holden, 30 Eldon Street, Barnsley, chemist. 192,696.

Device of fountain in wall; for mineral and aerated waters. By John Milne, Bridgefield, Stonehaven. 192,079.

"OLPHAR"; for a liquid toilet-preparation. By L. Bidwell, Ridgeway House, Colyton, Devon. 192,014.

Device of gondola; for perfumery, toilet-articles, &c. By Stewart Brothers & Spencer, Rochester, soap-makers. 192,886.

Sketch of Trilby on palette; for toilet-soaps. By Petri Brothers, 39 Lime Street, London, E.C. 191,388.

Device of tablet of soap, with wording; for perfumery, toilet-articles, &c. By J. Crosfield & Sons, Bank Quay, Warrington, soap-manufacturers. 192,886. The essential particular is the device.

Comic sketch of peacocks, supposed to be singing in choir; for cochineal. By J. Greaves & Co., 13 Ridgefield, Manchester, merchants. 192,933.

A Fatal Experiment.

ON Thursday afternoon, February 21, the neighbourhood of Red Lion Square, W.C., was startled by a terrific explosion at No. 15, where Messrs. Redwood & De Hailes have their chemical analytical laboratories. It soon transpired that the explosion had occurred while a Mr. Arthur French St. George was experimenting in regard to a patent for a candle-material. Mr. St. George's solicitors had asked Messrs. Redwood & De Hailes to allow him to conduct under their supervision certain experiments which they considered to be necessary to cover the patent thoroughly, and at the time of the explosion he was working along with Mr. Thomas W. Glass, one of Messrs. Redwood & De Hailes's assistants. We learn on inquiry that Mr. St. George had been working at 15 Red Lion Square for a week, a small laboratory (about 12 feet by 9 feet) at the back of the first floor being reserved for his use exclusively. One of the experiments which he wished to perform was to heat certain substances under a pressure of 30 lbs., and for this purpose he obtained a new compressed oxygen-cylinder about 12 inches long and 5 inches diameter. The substances which he was to put in this were not explosive in nature, and Mr. de Hailes approved of the experiment, and saw that the cylinder was right. It was understood that a small quantity of the substances would be put in the cylinder, but for some mysterious reason Mr. St. George packed the cylinder full after Mr. de Hailes had left the laboratory, and in this condition he placed it on a combustion-furnace with sixteen Bunsen burners. In a few minutes Mr. St. George seemed to hear a sound within the cylinder, and bent over it to listen. Mr. Glass was standing behind him taking notes. At this point Mr. de Hailes, who was in his office in the front, heard a terrific explosion, and rushing through the main laboratory, saw clouds of smoke issuing from the smaller one beyond. He called out, "Are you all right, Glass?" and the reply came, "Yes." He was stepping into the laboratory when he was horrified to find at his feet the dead body of Mr. St. George with the upper half of the head blown away. The gas-cylinder had been ripped up from top to bottom, and had been propelled from the furnace, striking Mr. St. George in its flight, and then passing through the ceiling above. Mr. Glass was severely burned about the face and was considerably shaken. The damage to the laboratory was surprisingly little; for example, a large balance-case, 3 feet from where the furnace was, was not touched, the force of the explosion being in the other direction. When our reporter visited the laboratory it was, for official reasons, in the condition of the time of the explosion, and though the blood had been removed there were all over the shelving and walls bits of brain and skull. There were many rumours in the daily papers as to the nature of the experiments and the effects of the explosion, but it would serve no purpose to repeat these after our own observations and in view of the special report of the inquest, which we subjoin.

The inquiry was opened on Monday afternoon at the Holborn Town Hall by Dr. G. Danford Thomas, the North London Coroner. The deceased, Arthur French St. George, was 34 years old, and resided at Coxwold House, Earlswood, Surrey. Inspector Taylor, of the E Division, appeared on behalf of the Commissioners of Police, and Mr. A. Spencer, chief officer of the Public Control Department of the London County Council, was present in court.

The Coroner, in opening the inquiry, stated that he had received a letter from Sir Vivian Majendie, Inspector under the Explosives Act, who, with Dr. Dupré, was making experiments with chemicals similar to those used by the deceased. They had not quite completed their investigations, and asked him to adjourn the inquiry so as to give them time to complete.

Agnes St. George, widow of the deceased, deposed that he had been occupied at 15 Red Lion Square, Holborn, making experiments with regard to a patent which he was bringing out, and had left home that morning in his usual health and spirits.

Mr. Alfred James de Hailes deposed that Mr. St. George had been using their laboratory for the past week for the purpose of making experiments in connection with a patent grease for candles which he had hoped soon to produce. On Wednesday, an oxygen-cylinder arrived, but it was

old and rusty inside, so he advised Mr. St. George to send it back and have another in its place, which was done. This one arrived on Thursday morning, and was quite new. It was guaranteed to stand a pressure of $1\frac{1}{2}$ ton, and as Mr. St. George only required a pressure of 30 lbs., witness thought it quite safe. It was about a foot long by 5 inches in diameter, and would hold about 10 feet of compressed gas. Mr. St. George then put some liquid substance into the empty cylinder, and hermetically sealed it. There was no safety-valve to it. From notes which Mr. Glass, the assistant, had taken concerning the liquid which had been used—he being present at the start of the experiment—witness said he should certainly think Mr. St. George did a most foolhardy action. The cylinder was placed in a combustion-furnace, and, naturally, a few minutes after there was a terrific explosion. He was in his room at the time.

The Coroner: What was the nature of the liquid the deceased used? Witness: If this inquiry is to be adjourned, I beg you will allow me to keep this substance a secret, as at present the rights for the patent have not been protected, and the publication of its properties might be disastrous to everybody concerned, especially the widow, who is interested in it.

The Coroner: Well, cannot you give us some idea of the contents? Were they explosive or not? Witness: If you will allow me, I would rather keep the particulars until the adjournment.

The Coroner: Very well; I am agreeable if the jury are.

Mr. Spencer: Do I understand aright; did Mr. St. George want a pressure of 30 lbs. to the square inch? Witness: I believe so.

Mr. Spencer: Could he really tell what pressure he had got without a safety-valve, which you say this cylinder had not got? Witness: I really could not say. I have not given it a thought.

Mr. Spencer: This cylinder was guaranteed to stand a pressure of $1\frac{1}{2}$ ton. Was that on the whole cylinder or on the square inch. Witness: I do not know.

(The maker of the cylinder here stepped forward, and stated that it was guaranteed to $1\frac{1}{2}$ ton to the square inch.)

Mr. Spencer (to the Witness): Then what in your opinion was the cause of the explosion? Witness: Considering that the cylinder was hermetically sealed and the heat it was put into, an explosion would naturally take place. It would have been a source of wonder if it had not.

Mr. Spencer: When Mr. St. George said he wanted a pressure of 30 lbs., I presume he wanted a pressure of two atmospheres? Witness: I really did not think about it.

Mr. Spencer: If you had known he was applying heat to a cylinder without any safety-valve at all, you would probably have stopped him? Witness: I most certainly should have done so. It was a silly thing to do.

By the Coroner: I should consider Mr. St. George was an expert, a very capable chemist indeed, and certainly well acquainted with laboratory-work, and not one, I should have thought, who would have made the mistake he did. Continuing, he said he heard the explosion, and on going to the laboratory found the deceased man lying on the floor, with half his skull blown away. He could not explain the scene, but had had a photograph taken, which he produced in court. He immediately called a doctor.

Dr. William Robert Gould, 11 Lamb's Conduit Street, deposed that he was called to 15 Red Lion Square on Thursday afternoon about 2 o'clock, and found the deceased lying on the floor of the laboratory dead. The roof of the head was missing, and the brain, which looked as though it had been cleanly cut out with a knife, was found in the large laboratory adjoining, a good 15 feet from the scene of the accident. Part of the cylinder had lodged in the ceiling, but he could not see where it had burst. Death was no doubt instantaneous.

Mr. de Hailes, on being recalled, said that the cylinder was ripped up one side and driven into the ceiling.

The Coroner: I presume this is the same as if you were to seal up the outlets to an ordinary kettle—there would be an explosion? Witness: Yes.

Richard Russell, the deceased's assistant, stated that he did not happen to be in the laboratory at the time of the explosion, but he knew the cylinder had been filled with a liquid, screwed up, and then hermetically sealed and placed in the furnace.—At this point the inquiry was adjourned.

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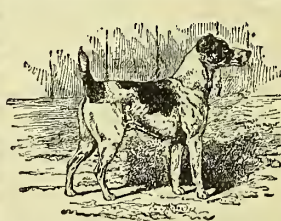
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Fletcher, Fletcher & Co., Holloway, LONDON.**A CITRONELLA-OIL ARBITRATION.**

ONE of the topics widely discussed in Mincing Lane drug-circles during the past two or three weeks has been the progress of an arbitration case relating to a parcel of citronella oil, the invoice value of which was about 300l. As it

is possible that more may be heard of this case, we refrain on this occasion from mentioning the names of any of the parties connected with it, and simply present the following outline of facts:—

On December 10 last, a London drug-firm purchased, through a drug-broker, four drums of citronella oil, weighing about 7 cwt. each, at 1s. 8½d. per lb., which was then the market price of the drug. The article was offered by the broker as "Citronelle oil, as per sample herewith," for delivery during January or February 1896, but the buyer does not appear to have exercised any special care in the examination of the sample before accepting the offer. The contract was dated December 19. It is written on an ordinary form, bearing on the back (as all such documents do) a clause to the effect that disputes must be referred to arbitration, according to the rules of the London Produce Brokers' Association. The contract reads:—"Bought by your order and for your account four drums citronelle oil . . . as per sample in your possession." On January 17 the broker tendered the goods to his buyer, who then applied for samples representing the average quality of each of the four drums. These arrived, and were apparently subjected to a closer scrutiny (although no analytical tests seem to have been applied) than had been bestowed upon the first sample. The result of the examination was altogether unsatisfactory. The buyer sent for the broker and expressed the opinion that the oil was not up to the fair standard of quality. He also then asked, we understand, for the name of the ship in which the goods had come. It should here be observed that it is the rule in transactions of this kind either to ask for the name of the ship at the time of purchase or, in forward contracts, to do so when the time for delivery is near. This gives the buyer the security that the goods are of direct import—*i.e.*, will be handed to him in the same state in which they arrive. In this case the buyer appears not to have exercised that precaution. When, however, the quality of the goods was challenged the broker said that the oil was "land carriage"—that is to say that it came from a private warehouse. This, the buyer declares, came to him as news, and confirmed him in his decision to refuse the tendered parcel. The broker thereupon stated that he would communicate with his principal, whose name then transpired for the first time. The principal held the buyer to the contract, stating that the sale had been by sample, and the goods were equal to that sample. Each of the parties then named a produce-broker as arbitrator. The arbitrators failed to agree, and called in an umpire, who decided that the bulk was equal to the sample, and that therefore the buyer was bound to accept delivery. The buyer then offered to forego the goods at the price paid for them, notwithstanding that in the meantime the market price of citronella oil had advanced from 1s. 8½d. to 2s. per lb. This the seller also declined, and thereupon the question was referred to a committee of the London Produce Brokers' Association consisting of three brokers. Both the seller and buyer appeared before this Court in support of their contention. The seller repeated his former declaration that sample and bulk were equal, and that therefore the contract was valid, the quality of the goods having nothing to do with the matter. The buyer contended that the sample should be submitted to chemical analysis, as the ordinary test of smell and appearance was not necessarily conclusive of its quality, and that the finding of the analyst should guide the committee in its decision. This the committee agreed to, and specimens taken from the bulk and from that part of the sample accompanying the original offer (which had remained in the hands of the broker) were submitted to Mr. Chas. Umney, who reported as follows:—

SAMPLE No. I.

Sp. gr. at 15° C.	.. .. .	8571
Solubility in alcohol of 80-per-cent. strength	by vol. (sp. gr. 0.645 at 15° C.)	Not completely soluble in any proportion
The specific gravity and behaviour towards alcohol of the above strength indicate gross adulteration.		
The substance used for adulteration was found to be kerosene, the proportion present being between 40 and 42 per cent.		
<i>Note.</i> —Pure citronella oil has a sp. gr. of from .887 to .900 at 15° C., and is soluble in ten times its volume of alcohol of 80-per-cent. strength.		

This specimen was taken from the sample submitted with the original offer; the one taken from bulk was identical with it, excepting that its sp. gr. was .8577.

If any slight difference exists (Mr. Umney reports) between the odour of the two oils, it is dependent upon the kerosene with which they are adulterated, that contained in No. 1 being of a better grade and freer from odour than that in No. 2. In my opinion no sufficient difference exists between the oils to make their commercial value other than practically identical.

Notwithstanding these analyses the committee decided in favour of the seller, and gave the following award:—

Appeal Decision, February 17.—Your appeal against the award of the arbitration on the contract dated December 19, 1895, for four drums citronelle oil sold for delivery during January-February, 1896, has been considered by a committee in accordance with Rule 7 of the Association, and they have decided as follows—*viz.*, to confirm the umpire's award that the delivery is equal to the sample and must be taken by the buyer.

(Signed) ANDREW DEVITT, President.

Apart from considerations of commercial morality involved in the question, the matter is of considerable trade interest for various reasons. In the first place it shows a recrudescence of the practice of adulterating citronella oil, which was believed to have been put a stop to some three or four years ago through the exertions of Messrs. Schimmel & Co. That firm's denunciations were directed against the sophisticating Singalese. There is no evidence that those gentlemen have had a hand in the mixing process disclosed by Mr. Umney, neither is there anything to show that the adulteration has taken place in London. From this point of view alone the obscurity in which the origin of the oil is involved must be regretted. Buyers of citronella oil, however, will do well to beware of purchasing before they have ascertained the quality of the goods offered, especially because the purity test is one which, to be made roughly, requires no other appurtenances than a bottle of 80-per-cent. alcohol. From a legal standpoint, also, the arbitrators' decision raises an interesting question. When a person deliberately declares that he offers "citronella oil" is he justified in supplying it mixed with 42 per cent. of kerosene? The clause *as per sample* might be held to safeguard him, but there is in the Sale of Goods Act (56 and 57 Vict., 1893) a section which provides that "where there is a contract for the sale of goods by description, there is an implied condition that the goods shall correspond with the description; and if the sale be by sample as well as by description, it is not sufficient that the bulk of the goods corresponds with the sample if the goods do not also correspond with the description." This section appears to have been ignored by the brokers who formed the court of appeal in this instance. But it is perhaps worth the while of buyers to consider whether it would not be preferable to reserve liberty of action to appeal to the law of the land rather than to bind themselves, on their contracts, to abide by the decision of gentlemen who are neither legal nor scientific specialists.

A COMMON DANGER.

WHEN her Majesty in 1839 appointed a Royal Commission "to inquire and report what is the effect, if any, of food derived from tuberculous animals on human health, and, if

prejudicial, what are the circumstances and conditions with regard to the tuberculosis in the animal which produce that effect upon man," it was not the claims of science which moved the appointment, but the urgency of repeated deputations of butchers and meat traders who waited upon the Government and represented that meat of good quality was constantly seized and destroyed by inspectors without compensation. They claimed that the meat was healthy if the animal showed only local tuberculosis, and this statement the Government desired to prove or disprove. The inquiry had been almost concluded, when, owing to the death of Lord Basing, the chairman, the Commission was dissolved in 1894, and a new one was appointed, with the late Sir George Buchanan as chairman, his colleagues being Professor G. T. Brown, of the Royal Veterinary College, Dr. J. F. Payne, F.R.C.P., and Professor J. S. Bardon Sanderson, with Mr. Leopold Hudson, F.R.C.S., as Secretary. The work of these gentlemen has consisted in examining the literature of the subject, in questioning those well qualified to speak upon tuberculosis in animals, and in encouraging special research bearing upon the subject of inquiry. The report of the Commission has recently been published, the conclusions being excellently summarised in part I, obtainable from the Queen's printers for 2½d., while the minutes of evidence and special inquiries are printed in a 7s. 6d. volume. Never before has there been brought together such a mass of information regarding (1) the supply of tuberculosis-infected meat and milk coming daily into our markets, (2) the conditions necessary to render such food safe for use or to exclude that which is incurably dangerous, and (3) the undoubted causation of tuberculous disease by consumption of such food. These important subjects are discussed in the report with that detail which is only possible when a Royal Commission takes a subject in hand. At present we can only briefly indicate some of the facts which the Commission has brought to light.

It has long been known to medical men and veterinarians that tuberculosis is an extremely common disease amongst the so-called domestic animals—cows and swine—and it is easy to imagine that if human beings were herded and housed as cattle are, consumption would be much more prevalent than it is. We have no means in England for ascertaining to what extent tuberculosis exists amongst domestic animals, but the statistics of the Copenhagen slaughter-houses for four years (1890-93) may be taken to be no worse than English statistics would be if we had the same rigorous method of inspection. The Copenhagen figures are:—Of 132,294 oxen and cows, 23,305 (17·7 per cent.) showed evidences of tubercle; of 8,292 swine, 1,272 (15·3 per cent.) showed evidences of tubercle; of 185,765 calves, 369 (0·2 per cent.) showed evidences of tubercle; of 337,014 sheep, one only showed evidences of tubercle.

The first lesson which these figures teach is that tuberculosis is an acquired disease in oxen and cows; 0·2 per cent. of calves showed tubercle, but 17·7 per cent. of oxen and cows. This must be largely due to the manner in which the animals are herded and housed. But from the public health point of view the main point is that so large a proportion of the animals slaughtered are tuberculous; is the flesh of such animals infectious? To that question Dr. Sidney Martin addressed himself, and by feeding young pigs, guinea-pigs, and other animals with the raw meat or with imperfectly cooked meat he produced tuberculosis in many of them. He does not say that the tubercle bacilli permeate all parts of an ox or cow suffering, *e.g.*, from tuberculosis of the lungs, but he points out that in slaughtering such an animal the butchers' knives and hands convey the tuberculous matter to most parts of the meat, which is thus

smearred with highly infectious stuff. Dr. Sims Woodhead took up the matter at this stage by endeavouring to find how far the ordinary processes of cooking would affect the contagion of contaminated meat, and while he found that roasting, boiling, or stewing would not avail to render wholesome in its deeper parts any piece of meat that contained tuberculous matter, because there the temperature never exceeded 60° C., the surface was sterilised, and so would a steak or a chop be. The report suggests that the internal organs of animals are risky food-material, but that the solid fleshy parts which have been well cooked may be eaten with perfect safety.

In many respects the inquiry regarding the milk of tuberculous cows was far more important than that on meat. Dr. Martin investigated this subject, feeding non-tuberculous animals with natural milk containing tubercle bacilli. Various precautions were adopted, but it suffices for our purpose to state that milk as it was taken from the cow served to give consumption to non-tuberculous animals. This milk is only produced by cows suffering from tuberculous disease of the udder, and the Commission rightly points out the necessity for isolating such animals, so that their milk may not be given to the public. At present there is nothing but the conscientious scruples of dairymen to prevent the infection of the whole of our milk-supply, and the fact that infected milk does get into the market shows the necessity for supporting moral backbone by Act of Parliament. Meanwhile it is comforting to know that consumers have a remedy. Dr. Woodhead's research shows that the most deadly tubercular material can be rendered innocuous by the action of a temperature of 212° F. A lower temperature than this is sufficient when allowed to act for a longer time, but boiling, for an instant even, renders the tubercle bacillus absolutely innocuous. As the outcome of his numerous experiments, Dr. Woodhead tells us that sterilisation of tubercle bacilli can be effected by heating the milk in a water-bath, continuing the process until the temperature has risen from 176° F. to 198° F., a result which in most cases requires, he says, each quart of milk to be in the water-bath for a half-hour. This is an important observation in view of the growing practice of sterilising milk for infant-feeding, and we may urge the greater need for stricter attention to milk sterilisation, and the help that chemists and druggists can give in making the foregoing facts public. It is really in the interests of the trade to do so, as British druggists have a great deal of leeway to make up before they have business in such apparatus as Soxhlet's sterilisers as their continental and American *confrères* have had for years. We hope the Government will bring the inquiry to its logical conclusion by enacting such measures as are necessary for giving effect to the recommendations of the Commission.

WILD BLACK-CHERRY BARK.

A DRUG has been offered repeatedly of late in Mincing Lane under the name of wild-cherry bark, which, even to the broker's eye, was sufficiently distinct from the bark usually known by that name to cause it to be offered with the proviso that it was "not guaranteed genuine." The true wild-cherry bark, or that which is generally known as such, is furnished by *Prunus virginiana*, a North American tree of great height, the trunk being covered with a rough blackish bark, which, as seen in commerce, is in pieces of various sizes, more or less curled, usually destitute of epidermis, of a reddish cinnamon-brown colour, and with a short fracture. In a fresh state or when placed in water it emits an odour resembling that of peach-leaves. The bark which has been recently seen is of a reddish-orange colour with occasional

darker patches. On the exterior it is somewhat flaky, appearing as though small pieces had broken off or been scooped out. It is about the same thickness as true wild-cherry bark, and has a similar short fracture. It is the produce of *Prunus serotina*, and is known in America as wild black cherry or rum cherry. Its distribution is given as Southern Ontario, southward through the Atlantic forests to Matanzas Inlet and Tampa Bay, Florida; west to the valley of the Missouri River, Dakota; Eastern Kansas, the Indian Territory, and the valley of the upper San Antonio River, Texas. The bark contains a bitter tonic principle; infused with cold water, generates a small percentage of hydrocyanic acid; and is employed in America as a tonic and sedative in cases of pulmonary consumption, in the form of cold infusions, syrups, and fluid extracts. Thus it will be seen that the barks of both species have similar properties, and it is not unlikely that therapeutically the two barks may be equally valuable.

"TRUTH" ON CARBOLIC-ACID POISONING.

In the current issue of *Truth* the editor concerns himself with a more useful pharmaceutical topic than the alleged "churlishness" of the Editor of this journal. Basing his remarks on the "astonishing facts" which were brought out by the diagram published last week in *THE CHEMIST AND DRUGGIST*, showing the rapid increase of carbolic-acid poisoning, *Truth* states that

during the period 1890-1894 the number of suicides from strychnine and "vermin-killer," prussic acid, arsenic, and other scheduled poisons shows little variation, and the mortality from each is below 50 per annum. Opium, laudanum, and morphia are responsible for more deaths, and show some increase in fatal results, having advanced in the same period from 167 to 185 per annum. But carbolic acid, which starts in 1890 with 69 deaths (less than half the number credited to opium), rose to 94 in 1891, 106 in 1892, 149 in 1893, and in 1894 jumped up to the alarming total of 201 deaths. The significance of these figures is enhanced by the consideration that, as the deaths from the other poisons have in no way fallen off, the whole of the increased mortality from carbolic acid is so much net addition to the suicide-rate of the year. It has also to be remembered that among all the poisons in the list not one produces so horrible and painful a death as carbolic acid. The moral of these facts is obvious. By the Pharmacy Act—which was passed when carbolic acid was hardly known as an article of commerce—any substance can be added to the scheduled list of poisons, the sale of which the Act regulates, by an order of the Privy Council, on the recommendation of the Pharmaceutical Society. The Society has strongly urged the necessity for scheduling carbolic acid, and the recommendation has been backed by scores of coroners' juries. The Privy Council, however, refuses to move. Doubtless there are arguments against restricting the sale of carbolic acid. They can only rest, however, on the importance of the liquid to the health of the community and the repression of disease; and what do such arguments come to in the face of the fact that the stuff has caused two hundred and one deaths in a single year, and that within two years its fatal effects have doubled themselves?

It is to be hoped that this strong expression of opinion from a journal which certainly has no trade bias will have the effect on the responsible officials which its obvious justice deserves.

DUPLICATE COMMISSIONS.

The letter which we publish elsewhere from "Bombay Chemists" opens a subject of much importance closely affecting commercial honour. It shows what the severe competition for foreign trade is likely to lead to. Commissions on purchases in this market have been cut down to 2½ per cent., a rate which can hardly make merchant princes of the heads of the buying houses.

THE "IDLER" TEST FOR ACONITE.

In the discussion which followed the reading of Professor Dunstan's paper on the "Detection of Aconitine" at the last evening meeting of the Pharmaceutical Society, Mr. Gerrard spoke of the urgent need for a reliable test for aconitine. "A Reader," who sympathises with the desire, is good enough to send us a story from the *Idler*, by Allen Upward, entitled "The Picture of the Curse" as a contribution towards this object. It furnishes one of the most ridiculous examples of the introduction of a toxicological effect into a story which we have ever met with. For the purposes of revenge an Italian painter has placed a picture in a certain position, and has fixed a chair in front of it. Everybody who sits on that chair to look at the picture dies. The last victim is a count, and then the mystery is discovered.

The Professor drew out a sharp penknife. Opening the blade he inserted it deliberately at the edge of the crimson velvet [at the back of the chair], and rapidly ripped it away.

A steel box with a projecting needle is discovered, and it is made clear that the point of the needle reaches through the velvet covering and pricks the sitter. On opening the box

we perceived that the needle was connected with a narrow glass jar or tube containing a liquid. The Professor pressed his thumb-nail against the point: it yielded slightly, as if working on a spring, and a little jet of the liquid in the tube instantly suffused the needle, and left a drop on Herr Rounfeldt's nail.

At this sight his expression grew grave in the extreme. He wrenched away the phial from its place, and cautiously sniffed at its contents. Clenching his teeth, he set down the phial, with the single word—

"Aconite."

My flesh crept as I witnessed, &c.

The author will scarcely convey that creepy feeling to his readers. If the wonderful device which he describes excites them in any way, it can only be to a smile.

AT THE INDIAN COUNTER.

A subscriber sends us the following advertisement of "Malcom's Shaving-powder or Barbr's out witted," taken from an Indian journal:—

Look at this Gentleman. How he is Jolly by using Malcom's Shaving Powder which has shaved his hairs, Beards, Mustaches, &c. If anybody wants to be like him then please order for one pot. Price As. 8.

Per Doz. 4-8.

½ Doz. 2-8.



The last sentence is distinctly good, and ought to have secured a flow of orders "for one pot." By the same mail that brought us the advertisement we received a postcard from Simla, addressed to "The Secretary of the C. & D.," as follows:—

Sir! I most humbly and respectfully beg to bring to your notice that I want to buy Nankin Brown from your shop. And to say that old and vitiate Nankin Brown are procurable in India. Therefore I beg to trouble kindly send me some as a sample for my inspection and also intimate its price of each pound.

We regret we cannot oblige our correspondent, whose address is the somewhat vague one of "G.P.O."

GUN-HEADACHE is a trouble to sportsmen. It appears that a low state of the nervous system predisposes to it, but the "kick" of the gun and the jarring of the stock communicated to the jaw of the shooter, whose face touches the comb of the stock, produce the malady. The question is, What will cure it? A pneumatic stock, says a gun paper.

Röntgenography.

SOME RECENT FACTS REGARDING RÖNTGEN'S RAYS.

PROFESSOR OLIVER LODGE states in the *British Medical Journal* that he has succeeded in greatly reducing the exposure necessary to obtain distinct images on the photographic plate. He finds that certain fluorescent solutions, if applied to the plate and allowed to dry on, very materially hasten the process. In one instance he obtained a very good negative of the hand in 20 seconds. Another method which, although not giving such good results, is very promising, consists in placing a fluorescent screen immediately in front of the plate. This appears to us to be one of the most significant practical observations made since the discovery of the rays, and it is curious that Professor Salvioni's new instrument for "seeing through" solid substances by means of Röntgen rays depends upon a similar principal. The instrument consists of a black cardboard tube enclosed at one end with a disc of black cardboard coated internally with a fluorescent substance (barium platino-cyanide, sulphate of calcium, &c.); in the other end is placed a lens which permits one to clearly see the fluorescent surface. The object to be observed is placed before the luminous source given by a Crookes's tube, and then one looks at it through the cryptoscope placed at a suitable distance. As in the fluorescent cardboard the parts of the object impermeable to Röntgen's rays are drawn in shadow, thus the bones of the hand, coins in a purse, and the like, are clearly seen.

At a recent meeting of the Cambridge Philosophical Society Professor J. J. Thomson described experiments made on the Röntgen rays. In one of these the photographic plate was placed inside the vacuum tube so as to intercept the rays between the cathode and the walls of the tube; in this case the plate was not affected, showing that the fluorescence of the glass is necessary for the production of these rays. Other experiments were made to see if they could be excited by fluorescence without a cathode; the ring discharge was produced in bulbs, and caused a vivid phosphorescence; a plate protected by cardboard when exposed to the bulb for an hour was not affected, nor was any greater effect produced when the bulb was filled with gas such as oxygen, which phosphoresces under the discharge. It thus appears that both a cathode and a phosphorescent substance are required for the production of these rays, and that one without the other is inoperative.

In his Royal Society paper on the subject, Professor Thomson stated that all substances when transmitting the Röntgen rays are conductors of electricity. Captain Abney, in the course of the discussion on the paper, cited several facts which, in his opinion, excluded the theory of direct photographic action in any ordinary sense, and indicated some preference for the view that the Röntgen rays acted by first setting up phosphorescence in the glass at the back of the sensitive film. This view was corroborated by an experiment described by Professor Dewar upon platino-cyanide of ammonium at low temperature. This salt, ordinarily fluorescent, only becomes phosphorescent at the temperature of liquid air. On being exposed to Röntgen rays instead of to ordinary light, while immersed in liquid air, it showed when the liquid air was poured off brilliant phosphorescence. This proves that Röntgen rays are convertible into visible light rays. A large number of experiments were described by Professor Dewar, showing that resistance to the passage of Röntgen rays increases with increase of atomic weight.

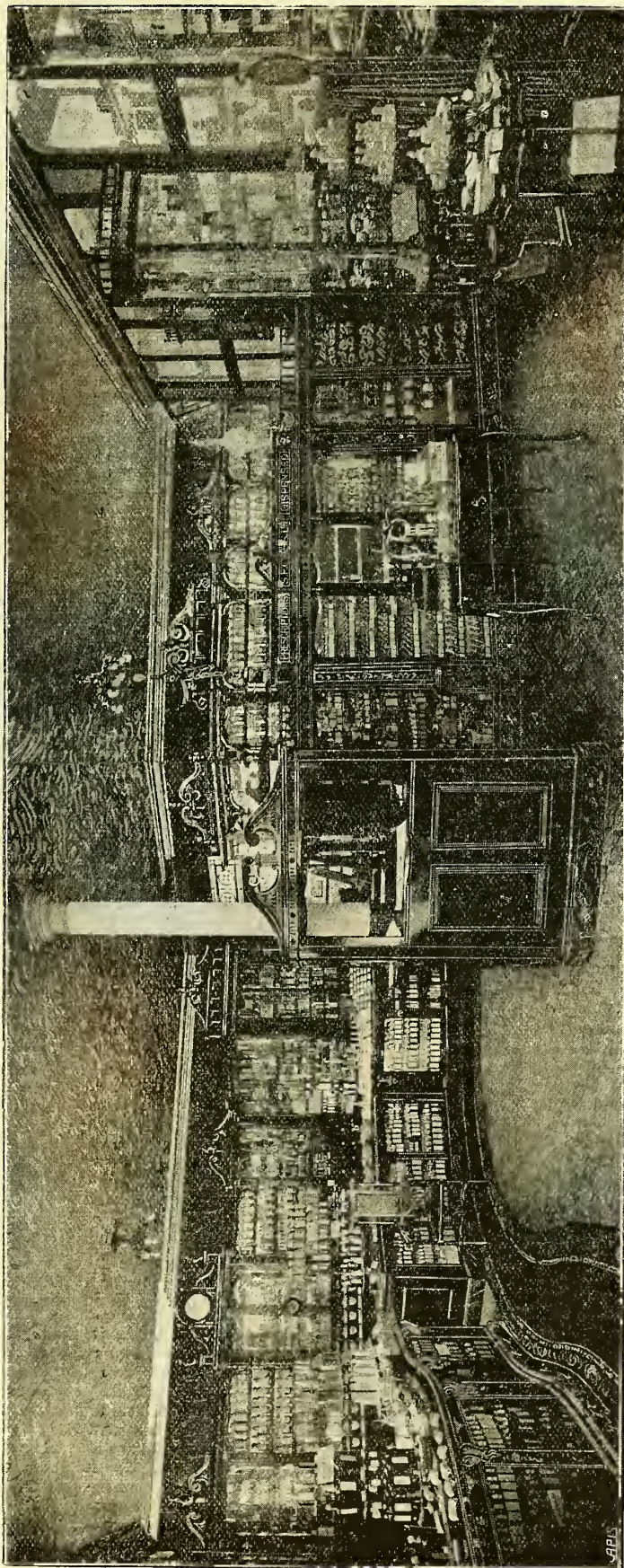
Claims to prior discovery of the rays have been fairly common since Röntgen made his announcement, but one far ahead of all is made on behalf of Mr. Wm. Brooks, photographic chemist, Reigate, who in 1877 read a paper at the Society of Arts on the matter; but his views were coldly received, and his discovery was ridiculed. Mr. Brooks then stated that he had obtained a positive image on a sensitive plate exposed in a closed box in perfect darkness. He made the experiment with an ordinary horse-shoe magnet, about 8 inches long, which he placed in the box, poles uppermost, and above the poles a perforated card.

The Newest Pharmacy in London.

THE long engraving which accompanies this note represents one of the latest developments in modern pharmacy as we have it in the West-end of London—the "pharmacy stores" of S. F. Goss (Limited), at 201 Regent Street, W. (the south-east corner of Conduit Street). Cramer, the pianoforte-maker, occupied the corner for many years, and recently the company trading under the above name acquired the reversion of the lease, and have completely remodelled the premises. First they took out the front and put in the place of the old-fashioned pillars and small windows a magnificent frontage of granite, with solid brass window-frames. This gave them splendid scope for window-display, as it provided them with five windows in Regent Street, four in Conduit Street, and two window-cases in the doorway. At this stage they called in Messrs. S. Maw, Son & Thompson to fit the bare square shop as no pharmacy in London, if in the world, is fitted, and it now looks as the photographic reproduction shows it, although we must confess that the camera has imparted a spaciousness to the foreground which the original scarcely justifies. But before one enters a good inspection of the windows is the natural thing to make, and if one were statistical he would find that there are about 200 plate-glass shelves in the eleven windows, and nearly 100 electric lights. One notices, too, that though the windows are all apparently the same in size, no two are alike, the shelves differing in all; and when standing before one of the windows it looks as if it went round the whole building, an effect due to mirrors cunningly set at the proper angle at each side. The result is magnificent, and when one turns round to the next window to inspect more closely the row of perfumes it is only to find that it has changed to a display of sponges or something else. Each of the eleven windows is devoted to one kind of stock; there is even a "patents" window which Mr. Goss says is the most effective advertisement he can get, as there are dozens of popular articles in the window and each of them ticketed at store price. The very most is made of the windows—they are artistic, go-ahead, paying windows, and not a bit tawdry.

The interior is not less telling than the windows, for immediately on entering the shop one gets the impression that no expense has been spared in furnishing it, and yet it does not seem to say so; indeed, it was only after some pressing that Mr. Goss told our representative that the wall and ceiling decoration is "Tynecastle," specially made for the shop. It is an exquisite decoration, much bolder in relief than Japanese paper, more lasting, and artistically as effective. Indeed, it seems the natural setting to the dark Cuban mahogany fittings. With the illustration before us it is unnecessary to go into details regarding the cabinet-work, but we may say of it that it anticipates the coming style in shop and house furniture; everything is dark, of subdued polish, and relief is obtained by bits of carving, curved mouldings, and so on. The style is a mixture, but renaissance of Louis XIV. period more than any other one. Care has been taken not to spoil the effect of the style by labelling the drawers in the customary druggist's drawer-label fashion, and although the labels are glass the background is the same colour as the wood, so that each looks like a thin beading border of gold, with skeleton letters of gold in the centre—a charming touch. The bottles and jars also harmonise.

The counters are the most peculiar thing about the shop. There are two serving-counters and a large dispensing-counter, and they all have a double-curved frontage. The immediate effect of this is that the apparent area of the shop is extended; secondly, there is an opportunity of more effective display, and the serving-space is increased. But the greatest advantage is in the first point. More might be said about the fittings, but we are unfortunate in having sent a representative to inspect the shop who got absorbed in those little things which make business go smoothly, and he completely surrendered himself to admiration of the fittings in the back of the counter. He calculates that without moving from one spot he could serve customers with a score of articles, all neatly stocked in stout cardboard boxes inserted in the counter as drawers. The back of the dispensing-counter showed also prodigality



of invention, the curves giving space for four or five workers where three only would be accommodated if the bench had been straight, and again the fittings showed the same utilisation of space for conveniences which characterised the serving-counters.

Coming to the customers' part of the shop what strikes a stranger most is the splendid showcase display. The whole of the fronts of the counters are thus utilised, and each of about a score of compartments is filled with distinctive toilet-specialities; for example, hair-preparations in one, dental requisites in another, skin-specialities in a third, and so on; and as the company use different styles of bottles (all white flints) and labels for each class of preparations, the effect is decidedly good. Besides this case-display the wall-spaces between the windows have upright cases abutting from them as shown on the right of the illustration. These cases go up to within 2 feet of the ceiling, and are arranged in the manner shown by one on the right of the picture. These upright cases are a novel feature in drug-store fitting, and are about the most effective display-cases we have seen. The way the sponges are shown in the shop is another thing that catches the eye. A table (old-fashioned elbow-legged) stands in the middle of the floor, and upon the top of this rests a long white-wicker basket filled with a selection of nice clean sponges. It looks a most tempting lot, and at least one customer succumbed to its seductions in the short time our representative was looking around. Mr. Goss sits (when he has a chance) at a writing-table of the same pattern just behind. It will be noticed that the counters and pay-desk rest upon bases of veined black marble. The floor is covered with linoleum, and the strip of carpet in front of the counter is an old design which has been specially reproduced in Persia. This is so precious that on wet days it is covered with felt.

There are many other features about this handsome pharmacy which it might be profitable to mention, but sufficient has been said to show that the owners and the shop fitters have admirably realised the needs of the neighbourhood. Regent Street is not a place for creating a family trade, although one of the oldest pharmacies in London stands in it, but there was the possibility of catching many of the thousands of passers-by in one of the most notable streets of the world, and S. F. Goss (Limited) have certainly gone about in the proper way to attract them.

HARNESSING NIAGARA. — The manufacture of chlorate of potash is about to be commenced at Niagara, the water-power of which will be utilised for this purpose. The process to be adopted is that of Blumenberg, which consists in passing an electric current through tanks containing solution of potassium chloride. The manufacture of calcium carbide is another industry which, within the next few weeks, will be commenced at Niagara, where it is estimated the carbide can be produced at \$10 per ton. As the raw materials required for its manufacture are only powdered coke and lime, this estimate may possibly be realised. In any case the production of acetylene from the carbide, and its utilisation as an illuminant, offers advantages for some special purposes, and it seems quite probable that its manufacture may ultimately develop into a large industry.

Anti-cutting Meeting in Bristol.

A MEETING of registered chemists, residing in Bristol and neighbouring towns, was held at that town under the auspices of the Bristol Pharmaceutical Association on Wednesday evening. Chemists were present from Bath, Weston, Clevedon, and Swindon. The meeting was called in the first instance to further consider the question of company pharmacy, which had been adjourned from a previous meeting. The council of the local association had also decided to give an opportunity to representatives of the Proprietary Articles Trade Association of explaining to the local chemists the objects of that Society, and the benefits to be derived from supporting it, and in consequence the discussion on the first question was limited to half an hour.

Mr. Allen, who took the chair during the first part of the meeting, stated that they ought to congratulate themselves on having a record attendance, between thirty and forty chemists being present. He stated that on the question of company-pharmacy there was but one policy open to them as chemists, and that was to strengthen the hands of the Pharmaceutical Society in the endeavour to amend the Bill shortly to be introduced dealing with limited companies.

Mr. Plumley moved a resolution pledging the meeting to support the Pharmaceutical Society in any action they may take towards amending the proposed Bill.

After a short but favourable discussion, in which Mr. Keen, Mr. Isaacs, and other gentlemen took part, the resolution was unanimously adopted.

Mr. Allen then introduced to the meeting the gentlemen present on behalf of the Proprietary Articles Trade Association recently formed in London. He said that the Secretary, Mr. Glyn-Jones, who was carrying the matter out with energy and ability, was present, and was accompanied by Mr. G. R. Barclay, of the well-known and old-established house of Barclay & Sons (Limited), Farringdon Street. They were pleased to see and welcome Mr. Barclay. They also had present Mr. Norris, of the Condal Water Company, who was taking a great interest in the new association. He called upon Mr. Barclay now to take the chair.

Mr. Barclay said that it had been well observed by someone that when a nation or a community found itself in difficulties and in need of a leader to get them out the right man always turned up at the right time. He had very great pleasure in introducing to the meeting the right man for them and the trade at large—Mr. Glyn-Jones—and he spoke in appreciative terms of Mr. Jones's zeal and untiring energy. He explained that the Association numbered amongst its members quite a respectable number of manufacturers, whilst the wholesale section included nearly all the principal houses in London, and some country ones. The retail section was not as full as it would be when the chemists realised what they could do towards promoting their vital interests. A good deal had been heard recently about the professional status of the chemist, and, if he (the speaker) remembered rightly, at a meeting of the Pharmaceutical Conference not very long ago chemists were advised by the President to look upon themselves as professional men, rather than men who have got to make a living by buying and selling. But surely such advice was not common-sense. A chemist, like any other trader, makes a living on the difference between the cost and selling prices of the goods he handles. Mr. Barclay concluded by asking Mr. Jones to address the meeting.

Mr. Glyn-Jones did. He said that the Association had been started on the principle that all sections of the trade had immense benefits to gain by co-operation. As retailers their goodwill was of infinite value to proprietors, and if the latter ensured fair profits the interests of the retailer lay in the direction of willingly distributing their articles; if the articles were allowed to be sold without profit they must expect retail chemists to use their skill in pushing articles the sale of which would help to pay their expenses. As a retail chemist he maintained that to be the only way to meet competition in proprietary articles. With drugs they were in a different position. If a customer wanted $\frac{1}{2}$ lb. mag. sulph. for 1d. there was little difficulty in asking the assistant in the customer's hearing to reach you $\frac{1}{2}$ lb. of "the salts we sell to the cattle doctor."

With proprietary articles the only criterion upon which the public judged us was price. In meeting the cutter no other course was open but that of discouraging articles which showed no profit. The manufacturers felt this, and most of them were agreed that their best interests lay in co-operating with the legitimate trader. This Association had been formed with the object of securing this co-operation. He was sorry to say that, though he was sure that nine-tenths of the retailers were anxious for the protection, up to the present the number of retailers who had joined the Association was not encouraging. He strongly urged those present to join at once. As an example of what could be done by individual effort, he stated that a fortnight ago the Association had but one retail member in Kidderminster and district. Since then Mr. Griffin, chemist, Kidderminster, called upon every chemist in the town and neighbourhood, and with one exception they had all joined.

Mr. Norris stated that the apathy of retailers was not always encouraging to proprietors who, like himself, had spent a good deal of time and large sums of money in the furtherance of this non-cutting policy. Most of them knew that he had always advocated it, and though he had not, as Mr. Elliman had done, subscribed 100l. to the funds of the Association, he had neither spared time nor money in insisting on his articles being sold at full advertised price. He did not pretend to be there as a philanthropist: it was a question of business, and he had always considered the retailers' support worth having.

The following resolution was then carried unanimously:—

That this meeting, having heard the report of the representatives of the Proprietary Articles Trade Association, pledges itself to support that Association.

Some discussion followed as to local organisation on the matter, and a resolution was unanimously carried calling upon the Council of the Bristol Pharmaceutical Association to act in concert with the London Association. A vote of thanks to the London representatives brought a large and enthusiastic meeting to a close. Between twenty-five and thirty of those present at the meeting then paid their subscriptions and joined the Trade Association.

NEXT WEEK'S MEETINGS.

We understand that the meetings to be held next week will be under the auspices of the Plymouth, Devonport, Stonehouse, and District Chemists' Association and the Exeter Association of Chemists and Druggists. The Plymouth meeting is to be held in the Foresters' Hall on Wednesday at 3 p.m., and the Exeter meeting at Exeter Arcade Lecture Hall on Thursday at 3 p.m. Meetings are also to be held at Manchester, Liverpool, Leeds, Bradford, Bolton, Edinburgh, and elsewhere, but the dates have not yet been fixed.

A SCHEME FORMULATED.

On Wednesday a meeting of the manufacturing section of the Proprietary Articles Trade Association was held, at which we understand a scheme was generally agreed upon among some half-dozen firms, which will be submitted to the General Council at its next meeting. We believe that several large manufacturers are willing to associate themselves somewhat on the basis of Mr. Elliman's method, with a proviso that any retailer cutting one of their articles will be refused the right of buying any of them at bottom prices.

CONFERENCE WITH GROCERS.

A deputation from the Proprietary Articles Trade Association visited the General Purposes Committee of the Grocers' Federation on Thursday afternoon, for the purpose of conferring with the latter as to the possibility of arranging a plan which would embrace the retailers of both sections. The deputation from the Association consisted of Mr. Gilligan (Liebig Company), Mr. Roberts (May, Roberts & Co.), Mr. Barclay (Barclay & Sons), Mr. Hall (Hall's Coca-wine), Mr. Tebbutt (W. Sutton & Co.), and Mr. Glyn-Jones, Secretary. There was a general discussion, but as the deputation were not prepared to suggest any definite scheme, it was agreed that the Federation would consult their members and communicate again with the Association.

Deaths.

CONNING.—On February 22, at West Kirby, Mr. John Conning, of West Kirby, and 18 Chapel Street, Liverpool, chemical-broker. Aged 67.

MORGAN.—We record with deep regret the death of Mr. Octavius Vaughan Morgan, J.P., one of the proprietors of this journal, at his residence, 13 The Boltons, South Kensington, S.W., on Wednesday last, February 26. Mr. O. V. Morgan, who was in his 59th year, was one of the younger members of the firm of Morgan Brothers, by whom THE CHEMIST AND DRUGGIST was founded in 1859. Messrs. Morgan Brothers were at that time carrying on a large business as druggists' sundriesmen in the City, and they had also founded a crucible-manufactory at Battersea. For many years Mr. O. V. Morgan took a most active part in the management of the latter business, and on its behalf he made numerous journeys to India, China, Australia, and America. Few men had such a thorough acquaintance with the condition of the British colonies as the late Mr. Morgan, and he was well known personally to a large number of the principal druggists where he travelled. At Battersea



he had always taken an active interest in all social, philanthropic, and religious movements, and when it became a Parliamentary borough Mr. Morgan was unanimously adopted by the Liberal party as their candidate. He was opposed by Mr. J. E. Cooke, but won the election by a majority of 712. At the general election in 1886, he held the seat against Mr. Cooper Willis, but by the reduced majority of 186. He remained in Parliament until the general election of 1892, when he was defeated at Ashton-under-Lyne, which borough he contested, having found the strain of a Metropolitan constituency too severe. He became seriously ill last autumn, and a long stay at Brighton before Christmas failed to restore him. He returned home in a very weak state, but seemed to be slightly improving until about a week ago, when a change for the worse occurred, with the sad ending we have already indicated.

SINCLAIR.—On February 19, at 7 Dowson Street, Blue Bell Hill, Nottingham, Vera Isabel Clark, infant daughter of Mr. Neil C. Sinclair, chemist and druggist. Aged 4 months.

SQUIRE.—On February 23, at the house of his daughter, Mrs. Percy Hickson, 6 Petherton Road, Highbury, N., Mr. Alfred Squire, late of Camden Square, N.W., and of Messrs.

Barron, Squire & Co., wholesale druggists, Bush Lane, E.C., in his 89th year.

STEWART.—On February 23, at his residence, 6 Grange Road, West Birkenhead, Mr. John Stewart, chemist and druggist. Aged 61.

Personalities.

PROFESSOR OUDEMANS, of Amsterdam University, has announced that he proposes to relinquish his chair on September 16 on account of his advanced age. The professor is now in his seventy-first year.

ON July 12 next Professor Stanislas Cannizzaro, the Italian chemist, reaches the sixtieth anniversary of his professoriate. It is proposed to present him on that day with a testimonial from his friends and admirers, in order to mark his services to chemical science. A committee has been formed for this purpose, which appeals to foreigners as well as Italian chemists. The honorary treasurer is Dr. V. Villavecchia.

MR. RALPH JOYCE and Mr. Frederick J. Pugh, who have been engaged in the business of Messrs. Evans, Sons & Co., Liverpool, for the past ten years, are leaving for Australia next month. About forty of their colleagues gave them a dinner at the Bee Hotel on Saturday last. Mr. George McLoughlin occupied the chair, and the dinner was followed by a musical programme. During the evening two dressing-cases and two portraits of the assembled company in groups were presented to the guests.

THE *Eastern Daily Press* (Norwich) states that "Mr. H. Bridges, a student at the evening classes for advanced chemistry, held at the Higher Grade Board Schools under the Norwich School Board, has given a proof of the value of these classes. THE CHEMIST AND DRUGGIST institutes every month a competition in practical analysis, and during the last eighteen months Mr. Bridges has been successful in winning six first-class prizes, having headed the list six times, thus holding the record. The competitions are open to all students of chemistry in the kingdom, and very large numbers compete. Mr. Bridges commenced his study of chemistry only about three years ago under Mr. R. S. Cahill, F.C.S., under whose able tuition he still continues." [Our records show that Mr. Bridges commenced to compete in March, 1894, when he was awarded 35 marks. The following month he got 86 marks, and in May the first prize, again carrying it off in August, October, and December. He appears to have competed seven times in 1895, and secured the first prize in September, and on the other occasions, with one exception, scored from 95 to 98 marks. Mr. Bridges took the second prize in January, and first this month, so that altogether he has had seven prizes during the two years.]

750,077l. 4s. 1d. is recorded as the value of the personal estate of Mr. Edward Henry Hills, of Bourne Place, Hildenborough, and of 11 Grosvenor Square, and of the Chemical-works, Deptford, who died on December 11 last, son of the late Mr. Frank Clarke Hills, of the Deptford Chemical-works, who died three years previously, leaving personally to the value of nearly two millions. The testator bequeaths to his wife 1,000l. and 150,000l., and to the Royal Agricultural Society of England 10,000l. in trust, to apply the income thereof in investigating the value and uses of the rarer forms of ash (tertiary) in the cultivation of crops for the food of cattle and for human food. On the same day the will was proved of the late Mr. Frank Ernest Hills, the elder brother of Mr. E. H. Hills, the value of the personal estate in this instance amounting to 603,000l. This is one of the rare cases on record in which the Treasury has levied succession-duty on the bulk of a fortune from a father and two sons dying within three years—Mr. Frank Clarke Hills, the father of the two gentlemen lately deceased, having died in 1893, worth nearly two millions, the bulk of which he left to his three sons, of whom only one (Mr. Arnold Frank Hills) now survives. The bulk of these huge fortunes has been made out of Hills' chemical-works at Deptford Creek, where ammonia salts and sulphuric acid are among the principal articles of manufacture.

Trade Reports.

42 CANNON STREET, E. C., February 27.

A DECIDED improvement has been noticeable this week in several articles of drug and chemical markets, while the drysaltery and spice markets and other departments more or less connected with the drug-trade have been more than usually active. The principal alteration which we can report in chemicals is an advance in morphia in consequence of the increased rates of opium. Some business has been done in quinine at prices closing firmly. Arsenic remains scarce, and is, if anything, again dearer. Carbolic acid fluctuating, but tending easier. Caffeine very quiet. Cream of tartar is lower, and foreign tartaric acid also offers at somewhat easier rates. Citric acid unchanged. Pilocarpine has been advanced in price. Chrysophanic acid remains firm. In heavy chemicals we have to report rather higher rates for permanganate of potash, which is exceedingly scarce. Recovered sulphur is also scarce. Sulphate of copper dearer. Acetates weak. Hyposulphite of soda tending easier. Bleaching-powder dull of sale, otherwise sodas and potashes are unchanged. In the departments of drugs, cod-liver oil has made a further advance. Opium is strong and dearer all round. Gum tragacanth firm. Balsam Peru neglected. Buchu-leaves are arriving freely, and jaborandi-leaves have also been received in quantity in Liverpool. Cinchona-barks steady for druggists' kinds. Colocynth firmly held. Cardamoms dearer. Cannabis indica tending higher. Ergot of rye unchanged. Gentian and cascara sagrada show no alteration. Soudan gums, if anything, easier. Ipecacuanha firmly held, while jalap remains quiet. Insect-flowers are again quoted much dearer. Menthol is lower, and so is HGH peppermint, while Japanese peppermint is fluctuating. Aniseed oil easier. Cassia quiet. Citronella unchanged. Castor oil firm and higher. Orris-root also a little firmer. In camphor very little business has been done, and the market remains quiet. Rhubarb and senna are dearer, and for beeswax very full prices have been paid. In drysalteries, &c., we have to report a firm and rather dearer market in shellac. Turmeric is also showing signs of improvement. Quicksilver fairly steady. Spices are generally firmer: this is especially the case in Zanzibar cloves, Jamaica and Japan ginger. Pepper is also stiffening. In oils the principal changes are as follows:—Linseed oil slightly lower, at 19s. to 19s. 7½d. Rape oil easier, 23s. to 23s. 6d. for crude and 24s. 6d. to 24s. 9d. for refined. Coconut oil slightly better, at 14s. 6d. for crude and 16s. 9d. to 17s. 3d. for refined. Ceylon cocoa-nut oil is slightly easier. Cochin also easier, at 26s. 6d., while palm and olive oil remain unchanged. Turpentine quiet, at 20s. 1½d. Petroleum easier, at 5½d. to 7d. for American and 5¾d. for Russian. The Bank-rate remains at 2 per cent., and silver has improved from 31d. last Thursday to 31½d. per oz. to-day.

Our New York correspondent wires on Thursday morning that the principal event of the week is the excitement in the *Opium* market, fair manufacturing qualities having advanced to \$2.20 per lb., which price, however, has not yet been paid. *Copaiba balsam* is from ½c. to 1c. per lb. easier, in consequence of heavy arrivals of Central American descriptions. Large sales have been made in *Cascara sagrada*, and the market-price is now nominally 4c. per lb. *Sassafras-root* is quoted at from 9c. up to 12c. per lb., according to quality. *Damiana*-

leaves have declined to 7½c. Jalap is rather easier. Ordinary *Tampico* mixed to good *Vera Cruz* ranges from 13c. to 16c. *Honduras sarsaparilla* is quoted at 29c. per lb. Good *Western senega-root* at 24c. per lb. *Spermacti* has become very quiet since last week's spurt in the article. *American refined* now offers at 32c. per lb. Large sales have been made in *Gum chicle*. The market is somewhat irregular, but with an advancing tendency, and the quotation ranges from 36c. to 37c. per lb.

Our Bergen correspondent wires on Thursday midday that the weather in the fishing districts has remained stormy since last week, the entire catch of fish for the Telegram season being 2,400,000, against 9,700,000 at the corresponding date of 1895, and the number of barrels of unrefined oil produced 880, against 2,800 in 1895. Business has been brisker in Bergen this week than last; 220s. per barrel, c.i.f., has been freely paid for best new oil, and 190s. c.i.f., for last year's.

"Opium has advanced 6d. per pound since last Thursday," wires our Smyrna correspondent on February 26. Since my last telegram 50 cases fair manufacturing opium have been sold at the parity of 8s. 6d. per lb., f.o.b., and selected grades at 8s. 8d. per lb., f.o.b. The news from the growing districts concerning the new crop continues to be very bad."

ACID (CARBOLIC).—The market is rather irregular and has a somewhat weaker tendency, the appearance indicating that prices have been run up rather too quickly, partly, in all probability, on account of the knowledge that certain "bear" sales required covering. We have heard, indeed, that crude 60-per-cent. oil has been sold this week at 2s. 4d. per gallon, which would be an advance of another penny; but in other quarters we are quoted 2s. 2½d. per gallon for this kind, which seems to be the nearest market-price. Seventy-five per cent. *Crude* is offering at 2s. 6d. to 2s. 7½d.; *Crystals*, 39° C. to 40° C. at 8d., and 34° C. to 35° C. at 7d. per lb.; and *Cresylic* (95 per cent.) at 10½d. to 1s. per gallon.

ACID (CHRY SOPHANIC).—Unchanged at firm prices, 25s. per lb. being still the quotation from foreign makers.

ACID (CITRIC).—Quiet at 1s. 2½d. per lb. from the makers, and 1s. 2¼d. per lb. in second-hand. The quotation for *Concentrated juice* is 14l. f.o.b.

ACID (TARTARIC).—Foreign makes are offering at 1s. 2½d. per lb. in second hand, but a determined attempt is being made to break the market, and it is freely stated that it is quite possible to buy foreign acid at 1s. 2¼d. per lb. on the spot. It must be said, however, that there does not appear to be anything in the position of the crude material to justify lower rates for the manufactured article. English unchanged at 1s. 3d. per lb.

ARSENIC.—Still advancing; small sales of white English powder have been made this week at 21s. for immediate delivery, but there is scarcely anything to be had even at that price.

BALSAM (PERU).—The demand seems to have fallen off entirely for the present. One of the chief holders refused a bid of 8s. per lb. recently, and requires 8s. 6d. on the spot, but we believe that 8s. 3d. would be accepted by others.

BUCHU-LEAVES are arriving freely, and a considerable quantity will probably be put up for auction next week.

CAFFEINE.—The market is dragging; 18s. per lb. seems to be the general quotation, but there are no buyers at that figure.

CAMPOR (CRUDE).—The only business reported this week is a sale of 300 piculs *Formosa* camphor, March-April shipment, at 167s. 6d. per cwt., c.i.f. terms. It is said that the syndicate bought this lot, but that there are no more sellers at that price.

CANNABIS INDICA.—Reported firmer. Medium to fair green is said to be held at 3d. to 4d. per lb., and it is stated that there is comparatively little offering.

CARDAMOMS.—The demand has been very strong privately since the last auctions, and from 2d. to 3d. per lb. advance on the sale-rates has been paid in several instances. For seed 2s. 11d. to 3s. per lb. has been obtained, a rise of 5d. to 6d. on the last auction-rates. *Wild* cardamoms are nominally quoted at 2s. 6d. to 2s. 9d. per lb., but none are offering at present. The new cardamom-crop will not be due until about April.

CASCARA SAGRADA.—Quiet, at from 21s. to 22s. 6d. per cwt., according to quality.

CINCHONA.—A parcel of cultivated Bolivian *Calisaya*, bought in at last week's London auctions, has since been sold at a slight advance upon the sale-rates.

COLOCYNTH.—Extremely firmly held so far as fine pale *Turkish* apple is concerned, for which 2s. 6d. per lb. is asked on the spot. Broken and seedy apple, however, may be had at from 1s. 9d. per lb. upwards. *Spanish* colocynth offers, according to quality, from 9d. to 1s. per lb. There seems to be a fair supply on the spot in spite of the high quotations.

COPPER SULPHATE.—Very firm. The Anchor brand has been advanced to 17l.; ordinary brands may be had at 16l., and in Liverpool the price is 16l. 15s. to 17l. per ton.

CREAM OF TARTAR has declined in price, the quotation of best white crystals in Bordeaux having gone down to 99s. per cwt. f.o.b. nominally. In London best white *French* crystals offer on the spot at 100s. to 100s. 6d., powder at 103s. 6d. to 104s. per cwt. It is generally believed, however, that the depression is only temporary.

GALLS.—*Turkish* and *Persian* kinds are extremely firmly held, but there is little offering for the present, green and white *Bassorah* being practically off the market. Blue galls are quoted at from 53s. to 55s. according to quality, and blue *Smyrna* galls at 46s. per cwt., the latter being in fair supply. A small parcel of *Japanese* galls has lately been sold at 50s. per cwt., c.i.f., for near at hand stuff.

GENTIAN-ROOT is still scarce and firmly held. One or two parcels of good *French* might be had at 21s. per cwt., but some holders require 22s. and even 22s. 6d.

GLYCERINE has been in moderate demand lately, and the market keeps steady at unchanged prices from the manufacturers. English crude glycerine is particularly firm at 35l. to 36l. per ton, and is very sparingly offered by the makers, while there are a good many inquiries in the market for delivery over next year. French saponified, on the other hand, has lately receded somewhat in price.

GUM ACACIA.—The market in *Soudan* sorts is extremely quiet and rather over-supplied, prices having a downward tendency. Common to good soft pale partly dusty sorts are quoted from 40s. to 55s. per cwt. Business has lately been done in *Ghesirah* gum at high prices, up to 35s. for good quality. East Indian gums have been in fair demand privately, but at the auction to-day the bulk of the supply was again bought in, and in other grades also little business was done. Eleven packages *Soudan* sorts sold, "without reserve," at 46s. to 46s. 6d. per cwt. for medium dusty hard sorts. Fine selected *Persian* drop realised 26s. per cwt. Fair *Aden* gum sold at 34s. to 35s. per cwt. *Ghatti*, medium to good pale at 33s. to 39s. per cwt. *Kurachee-Amrad*, medium hard reddish, 37s. 6d.; common red to unsifted amber, 25s. to 33s.; siftings, 29s.; and pickings, 20s. per cwt.

GUM OLIVANUM.—At auction to-day 120 packages sold at 35s. 6d. per cwt. for good pale drop, 18s. 6d. to 23s. 6d. for ordinary red to medium, 13s. for siftings, and 7s. 9d. to 8s. 6d. for ordinary to medium blocky garblings.

GUM TRAGACANTH has been in slightly better demand lately, and the market remains firm. *Persian* firsts at 14l. 15s. to 15l.; seconds, 13l. to 14l. 10s.; thirds, 11l. 10s. to 12l. 10s.; and commoner grades from 11l. per cwt. downwards.

INSECT-FLOWERS are still rapidly advancing, the present stock in Trieste being only one-third of a year ago. Holders are not inclined to make any firm offers, and the quotations are very irregular. They range from 75s. to 90s. for "open"

and from 132s. 6d. to 140s. for "closed" flowers, c.i.f., London. Business in closed flowers has been done at 72s. 6d., c.i.f. Trieste.

IODINE.—No definite price has yet been fixed by the syndicate.

IPECACUANHA.—Very steady. For good plump slightly damaged *Carthagena* 4s. 4d. per lb. is asked; for good *Rio* from 5s. 2d. to 5s. 6d. per lb. The 140-lb. case of *Singapore* root which was bought in at the last auctions has since been disposed of.

JALAP.—Rather dull of sale, although a few lots bought in at the last auctions have since been disposed of; 8d. to 8½d. is the price for fair to good *Vera Cruz*.

MENTHOL shows a very irregular market, but is on the whole tending downwards. On the spot 12s. 3d. to 13s. per lb. is asked, while for shipment the quotations vary from 11s. 9d. to 12s. 3d. per lb., c.i.f. terms. There is, indeed, nothing doing at present, but we are told that in more than one instance holders are very firm.

METHYLATED SPIRIT.—1s. 8d. per gallon, naked.

NAPHTHA.—Crude coal-tar, 30 per cent., is quoted at 10d. per gallon. Solvent, 90 per cent. to 95 per cent., at 1s. 2½d. to 1s. 3d. per gallon.

OIL (CASTOR).—Still going up. Fine tasteless *Italian* oil may still be had at 31s. 6d. per cwt., c.i.f. East Indian oil is quoted at 2½d. per lb. for first, and at almost the same price for second, pressings.

OIL (COD-LIVER).—At last Thursday's drug-auctions 10 casks of a yellow impure Norwegian oil sold "without reserve" at 155s. per barrel. They had been bought by the present seller at 80s. per barrel last year. A thousand gallons of *Munn's Newfoundland* oil were offered at 6s. per gallon c.i.f. from New York a few days ago. A counter-bid of 5s. 9d. c.i.f. was wired out, but the answer came that the parcel had been snapped up in New York at the parity of 6s. c.i.f. Privately there has been a further advance this week, best new non-congealing Norwegian oil having sold at 220s. per barrel. None of the leading importers, however, are disposed to make further contracts at that price, their general quotation being 230s. to 240s. per barrel on the spot, although one of the agents still suggest that bids of 210s. c.i.f. terms, might possibly be entertained. Old oil of good quality has been sold at 185s. to 190s., and in one quarter we hear that as high a price as 200s. has been obtained for it. One of the importers, however, quotes it at 190s., c.i.f., from Bergen. Some *Newfoundland* oil, in second hand, is offering at 6s. 6d. per gallon, but at that price it cannot yet find buyers. From the Norwegian district of Tromsøe we hear that hardly any liver is being obtained, on account of the stormy weather and the scarcity of the fish. What has been obtained, moreover, is getting more and more deficient in oil. The quotation on February 18 was 180s., c.i.f., but all the exporters were holding back. The London agent who suggested 210s., c.i.f., as the price for new oil tells us that his principals have refused bids at that figure.

OILS (ESSENTIAL).—*Eucalyptus* oil is fairly steady and in moderate demand. *Platypus globulus* offers in wholesale quantities at 2s. 2d.; 1-case lots at 2s. 3d. per lb. Fair to medium grades of oil may be had at from 1s. 2d. to 1s. 8d. per lb. The parcel of "Stockrider" amygdalina oil bought in at the last auctions is held for 46s. per gross, and a bid of 40s. has been rejected for it. *American peppermint* oil rather easier. It is said that HGH has been done at as low a price as 9s. 6d. per lb. on the spot, but we have not been able to confirm this, and 9s. 9d. remains the general quotation. *Wayne County* oil offers, according to quality, at from 6s. 6d. to 7s. on the spot; McKR at 7s. 9d. per lb. *Japanese peppermint* oil is lower, dementholised offering for arrival at 5s. per lb., c.i.f. terms. The last quotation on the spot was 6s., but that cannot now be obtained for wholesale quantities. It is said, however, that in 40-per-cent. oil there is no more available at the low price accepted at the last drug-auctions, and that 6s. 6d. to 6s. 9d. is now the bottom figure. *Oil of male fern* has been raised 1s. per lb., 4s. 9d. being the present quotation. All *Italian* essential oils are still rising, and it is added that the sale at auction was made for the

purpose of depressing the market in Japan. *Star-anise* oil easier, with sellers at 9s 9d. per lb. on the spot. The c.i.f. quotation is 10s. present shipment. *Cassia* dull of sale at unchanged rates. *Citronella*, 2s. to 2s. 1d. per lb. on the spot. *Lemongrass*, 2½d. per oz. spot, 2½d. per oz. c.i.f. January-March.

OPIMUM.—The demand in London has been pretty strong this week for all kinds, on account of the alarming news from Smyrna, but we are under the impression that certain brokers are trying to run up quotations rather too quickly. Many parcels, however, have been taken off the market, and as our stock before the movement was already small there is now very little obtainable. It is said that some purchases have been made here for Turkish account in the expectation of a further rise. The quotations are now as follows:—*Soft shipping*, 11s. 9d. to 13s. 3d.; good to fine *Manufacturing*, 8s 9d. to 9s. 6d.; second *Druggists*, 8s. 6d. to 9s.; and *Persian*, from 11s. 6d. up to 13s. for ordinary to fine bricks. A fair business has been done in manufacturing opium up to 9s. per lb.

OPIMUM SALTS.—On Friday last, in consequence of the advance in opium, the manufacturers' quotation for morphia was raised 3d. per oz. all round, powder being now quoted at 4s 7d., cubes at 4s. 9d. per oz. It is said that at least one of the makers wished to put up the price 6d. instead of 3d. per oz., but failed to persuade the others to follow suit. *Codia* remains unchanged at 10s. 6d. for fair quantities.

ORRIS.—It is said that in some quarters higher prices are asked for *Florentine* root, one importer having raised his quotation for good pale from 64s. to 67s. 6d. per cwt., c.i.f. On the spot the price is unaltered at 75s. per cwt.

PILOCARPINE.—A few days ago the two manufacturers raised their quotation from 5s. to 5s. 6d. per gramme for usual quantities, but 4-oz. lots are still obtainable at 5s.

POTASH SALTS.—*Yellow prussiate* of potash is quoted at 8d. per lb. for ordinary brands, but Beckton brand may today be had at 7d. per lb. *Saltpetre*: British refined, 21s. 9d. to 22s. 9d.; German, 20s. 7½d. to 21s. 4½d. per cwt., according to packing. *Montreal potashes*, 22s. 6d. *Pearlashes*, 37s. 6d. per cwt. *Cyanide*, 98–100 per cent., 1s. 4d. to 1s. 5d. per lb. *Bromide*, 1s. 8d. per lb. *Bichromate*, 4½d. per lb. *Chlorate*, quiet at 4½d. to 4¾d. on the spot or for forward delivery. *Permanganate* is very scarce on the spot, although the manufacturers' quotations remain unchanged at 65s. for small crystals. There is, however, very little available, and the second-hand asks 66s. to 67s. 6d. per cwt.

QUICKSILVER is rather firmer. The importers' price remains 7l. 2s. 6d., but in second-hand, sales have been made at 7l. 2s. per bottle.

QUININE.—Somewhat more active. The manufacturers' quotations are as follows:—*Howards*, bulk, 1s. 3d. to 1s. 4d.; 1-oz. vials, 1s. 4d. to 1s. 5d. *Whiffen's*, bulk, 1s. 2d.; 1-oz. vials, 1s. 4d. *Pelletier's*, 1-oz. vials, 1s. 5d. *Milan*, bulk, 1s. 2d.; 1-oz. vials, 1s. 4d. All the German brands, in bulk, 1s. 2d. per oz. The imports of bark into London between January 7 and February 18 have only been 2,954 bales of all kinds. Our stock on February 1 was composed of 25,665 bales, against 30,727 and 37,934 on the corresponding dates of 1895 and 1894 respectively. The stock this year was composed as follows:—*Eastern and African* barks, 9,664 bales; *S. A. Calisaya*, flat and in quill, 4,527 bales; *S. A. crown and Grey* barks, 295; *S. A. root*, 25; *Cartagena*, 681; *S. A. Colombian, New Granada, Pitayo, and Cupreca*, 10,473 bales. Sales of several thousand oz. German bulk at 1s 1d. per oz. have been made during the week, and since then 1s. 1½d. per oz. has been paid.

RHUBARB.—Several lots have changed hands since the last auctions at higher prices, an advance of 1d. to 2d. per lb. on the sale-rates having been paid for *Shensi* and *Canton*. Of the latter variety medium round is now quoted at 1s. per lb., medium to bold round at 1s. 2d., and ditto flat at 1s. 1d. to 1s. 2d. per lb. In *High-dried* root there is not much available below 11d. per lb.

SAFFRON.—The market is quiet, but steady, and no reduction is looked for, as the crop is now said to be all in firm hands.

SCAMMONY.—Still very firmly held for fine *Turkish* resin, firsts being quoted at 30s. to 32s. per lb. Of the other grades

there is very little available. *Scammony-root* is firmly held at 50s. to 55s. per cwt.

SHELLAC.—The market last week closed quietly, but firmly, at 94s. c.i.f., for TN orange, April-June shipment. On Monday, however, matters took a decided turn upward, and since then there has been a fair trade at firm rates, the market closing at 95s. c.i.f. *AC Garnet* has been sold at 85s., c.i.f., for February-April. On the spot fair TN is quoted at 98s., *AC garnet* at 92s. per cwt. At auction on Tuesday 309 cases were offered, of which 180 sold at 3s. to 4s. advance on second orange—viz., fine pale free, 105s. to 106s.; ditto, capey, 100s. to 102s.; medium, 94s. to 95s. per cwt.

SENNA.—A good deal of quiet buying has been going on this week in *Tinevelly* leaves, the inquiry having been particularly strong for good grades, which are getting scarce. In several instances somewhat higher prices have been paid than were accepted at the last auctions.

SODA SALTS.—*Hyposulphite* is very quiet, the spring demand for photographic purposes not having set in yet. It is expected that a new foreign make will shortly be placed on the market, and prices may then recede. Kegs are quoted at 7l. on the spot; casks at 6l. 15s., f.o.b. Tyne; 5l. 15s. to 6l., f.o.b. Antwerp. *Caustic soda* quotes as follows:—70 per cent., spot, 7l. 15s.; Liverpool, 7l. 10s., f.o.b.; 76 per cent., Liverpool or Tyne, 9l. 2s. 6d., f.o.b.; 60 per cent., 6l. 10s., f.o.b. Liverpool. *Soda crystals*, 42s. 6d., ex ship or wharf London, or f.o.b. Tyne, and 47s. 6d., f.o.b. Liverpool; 58 per cent. *Alkali*, 67s. 6d. in bags on rails, and 70s., f.o.b. Liverpool. *Beckton prussiate of soda*, 6d. per lb. *Bicarbonate*, 7l. 5s. per ton, in kegs from the warehouse, and from 6l. 5s. to 6l. 15s., according to packing, f.o.b. Liverpool. *Bichromate*, 3½d. per lb.

SPICES.—A considerable business has been done privately in *Cochin ginger*, at 37s. to 38s. per cwt. for rough, and about 800 piculs *Japan*, March-May shipment, have been sold at 18s. 9d. to 19s. 9d. per cwt. c.i.f. At auction 138 barrels *Jamaican ginger* sold at very high prices:—Ordinary dark lean to dull, 62s. 6d. to 77s. 6d.; medium dull washed, 87s. 6d. per cwt. *Cochin* was easier at auction, good medium to bold new crop, native cut, selling at 55s. 6d. to 56s. 6d.; C. and B. cut, old crop, 50s. to 60s.; cuttings and ends sold at 26s. to 31s. 6d. per cwt. *Zanzibar Cloves* have been very active this week, and several thousand bales have changed hands at 2½d. on the spot, and 2½d. to 2½½d. per lb. for June-August delivery. At auction 160 bales sold at 2½d. to 2½d. for good fair. Twenty-eight cases fine small bright picked *Japan Chillies* sold at 72s. 6d. to 75s. 6d. per cwt. *Mace* and *Nutmegs* are quiet and steady. *Pimento* firm at 2½d. to 2½d. for ordinary to good. *Pepper* has been rather more active, and closes firmer for black.

TEA.—The dull trade in the country has checked the firm tendency of the tea-market, and lower grades of both Assam and Ceylon were cheaper this week, useful common leaf Ceylon selling freely on Tuesday at 5d. and 5½d., and similar Assam at about ¼d. more money. Broken Pekoes, Indian and Ceylon alike, were irregular and in many cases distinctly cheaper, but in spite of this easier tendency country buyers are indisposed to operate, and dealers are complaining of lack of inquiry. Good Assams and Ceylons, however, remain very firm, the big blending firms competing keenly for anything with quality and character. Some very cheap first-crop Monings are now selling from 6d. to 7d., at very heavy reductions from prices current earlier in the season.

VERATRINE has just been considerably advanced in price. The last quotation was 4s. 3d. per oz., but the maker now asks 6s. 9d. per oz.

Heavy Chemicals.

(Where no prices are quoted the figures given in our table of February 8 still hold good.)

The market for heavy chemicals generally is rather quiet, and no new business of importance is to be reported. Fairly good inquiries for spring shipment are, however, afloat, and a slightly firmer tendency in a number of miscellaneous articles is apparent; at any rate, where changes have occurred they are mostly in an upward direction. The

demand for *Bleaching powder* is perhaps not quite so strong, and stocks are slowly beginning to accumulate. This, however, is only what can be expected at this time of the year, and a change is sure to take place very shortly. Prices remain steady. *Caustic soda* continues to move briskly, and stocks, as a rule, are rather low. The purest qualities of *Alum*, free from iron, meet with fairly good inquiry, especially from Turkey-red dyers, whilst demand for ordinary qualities for export is good. *Sulphate of alumina* slightly easier, though deliveries on contract keep well up to the average. *Sulphate of ammonia* is quiet, to-day's value Leith, London, and Hull being 8*l.* 8*s.* 9*d.* From Leith last week 448 tons were exported. *Chlorate of potash* rather quiet at the quotations given last week; but as makers are well sold ahead, the general impression is that the price will shortly be advanced to 5*d.* per lb. *Recovered sulphur* is scarce and quotations have risen to 4*l.* per ton in 2-cwt. bags, whilst a still further upward tendency is apparent. *Saltcake*, partly on account of the small demand from glass-manufacturers, is flat. *Arsenic* still continues very scarce; nominal quotations now stand 20*l.* to 21*l.* ex ship London for white powdered. For *Cotton* and *Linseed cakes* the demand is weak. *Sulphate of copper* very firm and dearer; Anchor 17*l.* and Liverpool 16*l.* 15*s.* to 17*l.* *Acetates* are weak, and prices have a lowering tendency owing to the market being considerably overstocked. *Sulphocyanides* meet with better inquiry at late rates. Little change is to be noted in the position of *Barium* products, a very firm tone being maintained all round, this being especially noticeable in the *hydrate*, *carbonate* and *nitrate*. The *chloride* is in rather better supply, but stocks are only very low. *Hyposulphite of soda*: slightly easier tendency, with value 2*s.* 6*d.* to 5*s.* per ton lower. *Lead salts* are in better request, especially the *nitrate*.

The Liverpool Drug-market.

Our Liverpool correspondent, writing on February 26, says that in *Acacia Gums*, *Arabic* descriptions meet with a fair amount of inquiry, and as sellers show a little more inclination to meet buyers business is looked for; the quotations have not been altered, 50*s.* to 60*s.* representing about the nominal value. Medium qualities offer sparingly and no sales have been made. *African Ginger* has been in good demand during the week, and large sales have been made up to 24*s.* on the spot and 23*s.* to arrive, with buyers at the latter price. *Sulphate of Copper* is very firmly held at 17*l.*, and considerable business has been done at this price. *Beeswax* has been attracting a good deal of attention and considerable sales have been made, an advance of fully 5*s.* per cwt. having been established. *Chilian* is now held for 7*l.* 15*s.* to 8*l.* per cwt. *Kola nuts* have been somewhat show at recent values, and one parcel at auction did not elicit any bids. *Jaborandi leaves*: A somewhat large parcel (42 bales) of small leaves has arrived and will be offered at auction. *Custor oil* has experienced a further rise during the week and *Good second Calcutta* is held firmly at 2½, which figure is also quoted for first-pressure *French* and *Madras*.

The Hamburg Drug-market.

Our Hamburg correspondent writes on February 25:—“Our market in general remains very quiet; there is also not much doing in the drug department at present, and prices have changed very little since last week. *Antimony* is unaltered; crude is quoted 33*m.*, regulus 65*m.*, per 100 kilos. *Arsenic* steady at 45*m.* and 46*m.* per 100 kilos. for white lump. *Acid (carbolic)* unchanged; 40-per-cent., 160*m.* and 163*m.* per 100 kilos. *Acid (tartaric)*, 220*m.* per 100 kilos. *Agar-Agar* (*Japanese isinglass*) shows only little business at unchanged prices, and is quoted to-day 230*m.* per 100 kilos. *Balsam copaiba*, pure quality, 3.45*m.* per kilo (firm). *Balsam Peru*, firmer at 17½*m.* and 18*m.* per kilo. *Camphor (refined)* remains quiet at 450*m.* and 460*m.* per 100 kilos; but higher prices are expected as soon as the usual spring demand sets in. *Cantharides* (*Russian*), 4 25*m.* per kilo. *Cascara sagrada*, 42*m.* per 100 kilos, quiet. *Cream of tartar* firmer, 255*m.* per 100 kilos (pure). *Glycerine* steady at last week's prices. *Menthol* unaltered, quiet at 29*m.* per kilo. *Oil (cod-liver)* is very firm, and higher prices are asked for 1896 non-congealing oil, which is quoted to-day at 200*m.* to 210*m.*; 1895, 185*m.* to 190*m.* per barrel. *Oil (linseed)* quiet at 40*m.* per 100 kilos., in barrels (excluding duty).

Price List.

BELOW are the current wholesale quotations (goods delivered in London) for spices, seeds, &c. Price-lists are given of essential oils in our issue of February 15, heavy chemicals and fixed oils February 8, fine chemicals February 1.

Article	Origin and Quality	Price per	From	To
Anise-seed	Chilian, fair to good	cwt.	s. d. s. d.	
"	Italian	"	21 0	22 0
"	Russian, fair unsifted	"	27 0	
"	Spanish	"	21 0	22 0
Anise (Star)	"	"	26 0	32 0
"	Chinese, genuine	"	92 6	95 0
Annatto-seed	Jap. (<i>Illic. religios.</i>)	"	—	—
Annatto paste	E. I., ordinary to fair	lb.	—	—
"	Cayenne	"	0 6	1 6
"	Guadeloupe	"	0 4½	
Areca-nuts	Ceylon or Mal.	cwt.	8 6	12 0
Arrowroot	Bermuda	lb.	0 10½	2 0
"	Natal, fair to fine	"	0 5	0 6
"	St. Vincent	"	0 1½	0 4
"	Queensland	"	—	—
Calumba	Good yellow washed	cwt.	30 0	40 0
"	Fair to good sorts	"	12 0	18 0
"	Ordinary brown	"	7 0	9 0
Canary-seed	Moroccan, fair to good	464 lbs.	35 0	42 6
"	River Plate, "	"	29 0	30 0
"	Spanish	"	46 0	50 0
"	Turkish	"	32 0	34 0
Capsicums	Natal, dull to bright	cwt.	50 0	60 0
"	E. I.	"	20 0	24 0
Caraway-seed	Dutch, fair to good	"	27 6	30 0
Cardamoms	Mangalore, med. - bold yellow	lb.	2 3	2 6
"	Mysore and Mal., ordinary to medium	"	1 8	1 11
"	Mysore and Mal., med. pale	"	2 0	2 5
"	Mysore and Mal., med. to bold pale	"	2 6	3 9
"	Tellicherry, ordinary pale fine	"	1 2	1 10
"	Aleppy	"	1 5	1 8
"	Wild Ceylon	"	1 6	3 2
Cardamom-seed	"	"	2 11	3 0
Cassia-buds	"	cwt.	—	—
Cassia Fistula	Wormy to fair	"	8 0	18 6
"	Fair unsifted quill	"	31 0	31 6
Chillies	Zanzibar, dull to bright	lb.	26 0	36 0
"	Sierra Leone, dull to bright	"	27 0	40 0
Cinnamon	Ceylon I., quill	"	0 10½	1 5
"	" II., "	"	0 10	1 2
"	" III., "	"	0 9½	1 0
"	" IV., "	"	0 8	0 10½
"	" chips	"	0 2½	0 6
Cloves	Amboina, fair to fine	"	0 3½	0 5½
"	Penang, fair to fine	"	0 5	0 10
"	Zanzibar, fair to fine	"	0 2½	0 2½
Clove-stems	"	"	0 1	0 1½
Cochineal	Teneriffe, grey and black	"	1 0	1 2½
"	" silver	"	1 3	1 4½
Coriander-seed	English	cwt.	20 0	21 0
"	East Indian, ordinary	"	5 0	5 6
"	East Indian, fair	"	8 0	9 0
Cotton-seed	Brazilian	"	3 9	4 9
"	Egyptian	"	4 9	5 0
Cumin-seed	Malta, fair to good	"	34 0	36 6
Fenugreek-seed	Moroccan, fair to good	"	8 6	9 0
"	East Indian, fair pale	"	7 6	8 0
Galangal	Fair Chinese	"	—	20 0
Gentian-root	French, fair to good	"	21 0	22 6
Ginger	African	"	21 0	23 0
"	Bengal	"	17 6	26 0
"	Cochin, bold, cut, scraped	"	68 0	80 0
"	" medium, scraped	"	55 6	57 6
"	" small, scraped	"	52 6	55 0
"	" rough, washed	"	37 0	38 0
"	" dark	"	30 0	32 6
"	Jam., good to fine	"	90 0	125 0
"	" sm. medium	"	81 6	85 0
"	" ordinary	"	62 6	77 6
"	Japan, unsplit	"	24 0	25 0
Gingelly-seed	"	324 lbs.	36 0	40 0
Guinea-grains (Grains of Paradise)	"	cwt.	16 6	20 0
Hempseed	Chilian	336 lbs.	27 0	29 0
"	Hungarian	"	—	—
"	Turkish	"	—	—
Hops	Kent, 1896	cwt.	30 0	105 0
"	Sussex	"	30 0	60 0
"	Farnham and country	"	40 0	70 0
"	Worcester	"	40 0	70 0
"	English, 1894	"	15 0	30 0
"	" old	"	5 0	20 0
"	Belgian	"	40 0	60 0

Article	Origin and Quality	Price per	From	To
Linseed	Bombay	416 lbs.	s. d. s. d.	
"	Calcutta, L.A.T. ..	"	36 0 37 0	
"	River Plate	"	32 6 34 6	
"	Turkish	"	32 0 37 0	
Liquorice-juice ..	Italian, good to fine sticks	cwt.	55 0 13 0	
"	Turkish block	"	34 0 38 6	
Liquorice-root ..	Persian, decort. ..	"	20 0 25 0	
"	" rough	"	6 0 7 6	
"	Russian, decort. ..	"	28 0 30 0	
Mace	Banda cult. reddish to pale	lb.	1 10 2 4	
"	" ordinary to fair ..	"	1 3 1 8	
"	Singapore, dark to pale ..	"	1 4 1 8	
"	E.I. wild, dark to good ..	"	0 2 2 0 4 1/2	
Millet-seed	French, fair	416 lbs.	38 0 42 0	
"	Italian, good to fine white ..	"	46 0 48 0	
"	Moroccan, common ..	480 lbs.	28 0 30 0	
"	" cleaned yellow ..	"	30 0 32 0	
Moss, Carragheen ..	Good to fine picked ..	cwt.	40 0 45 0	
"	Common	"	7 6 12 0	
Mustard-seed ..	Ordinary to fine ..	bushel	8 0 12 0	
Myrabolans	Bengal	cwt.	3 6 4 6	
"	Bombay, Bhimlie ..	"	6 6 7 6	
"	" Jubbulpore ..	"	5 0 6 6	
"	" Rajpore ..	"	4 0 5 6	
"	" Vingoria ..	"	3 6 5 0	
"	Madras	"	4 0 5 6	
Niger-seed	"	376 lbs.	28 0 29 0	
Nutmegs	Sing. or Penang, 78-57	lb.	2 1 3 2	
"	" 80-90 ..	"	1 9 2 1 1/2	
"	" 95-180 ..	"	1 0 1 8 1/2	
Nux Vomica	Common to good pale ..	cwt.	3 0 8 0	
Pepper, Black ..	Aleppy and Cochin ..	lb.	0 2 1/2 0 2 3/4	
"	Malabar, sifted ..	"	0 2 0 2 3/4	
"	Tellicherry	"	0 2 1/2 0 2 1/2	
"	Penang and Aitchin ..	"	0 1 1/2 0 2 1/2	
"	Siam	"	0 2 1/2 0 2 1/2	
"	Singapore	"	0 2 1/2 0 2 1/2	
"	Penang	"	0 3 3 6	
"	Siam	"	0 4 0 5 1/2	
"	Singapore	"	0 4 0 5 1/2	
"	Cayenne	"	11 6 12 6	
"	Long	"	0 2 1/2 0 2 3/4	
Pimento	Jamaica, ordinary to fair	"	34 0 35 0	
Poppy-seed	White	368 lbs.	29 0 30 0	
Rape-seed	Bombay, mixed ..	"	30 0 32 6	
"	Calcutta, brown ..	"	31 0 32 6	
"	Scinde and Gujerati ..	"	38 0 43 0	
Rubben-seed	Ordinary to fair ..	424	11 0 12 0	
Sago	Pearl, large grain ..	cwt.	9 9 11 6	
"	" medium grain ..	"	8 0 9 6	
"	" small grain ..	"	6 9 7 6	
"	Flour, Sarawak, pink to white	"	12 1/2	
Sesame-seed	(See Gingelly) ..	"	95 0 1 6	
Soy	Chinese, fair	gall.	4 6 5 0	
"	Japanese, fair	"	7 0 8 0	
Stavesacre seed ..	Fair merchantable ..	cwt.	17 0 19 0	
Strophanthus-seed	Ordinary brown ..	cwt.	12 0 15 0	
"	Kombé, fair to green ..	"	0 5 0 7	
Tamarinds	E.I., fair black ..	"	0 1 1/2 0 1 1/2	
"	W.I., fair to good new ..	"	0 1 1/2 0 1 1/2	
"	" old	"	7 6 11 6	
Tapioca	Brazilian (Rio) ..	lb.	11 0 12 0	
"	Flake, Penang	"	9 0 10 6	
"	" Singapore	"	10 0 11 0	
"	Flour	cwt.	7 6 11 6	
"	Pearl, bullets	"	11 0 12 0	
"	" medium	"	9 0 10 6	
"	" seed	"	10 0 11 0	
Teel-seed	(See Gingelly) ..	"	7 6 7 9	
Turmeric	Bengal	"	6 9 7 6	
"	China	"	7 0 7 6	
"	Cochin, finger	"	5 6 7 6	
"	" bulb	"	8 0 9 6	
"	Madras, finger, fair to fine	"	7 0 8 0	
"	" bulb and finger ..	"	6 0 7 6	
"	" bulb	"	—	
Worm-seed	"	"	—	

THE Students of the Finsbury College of the City and Guilds of London Institute held their annual conversazione on February 20. Chemical exhibits of considerable interest were contributed by Messrs. Howards & Sons, Hopkin & Williams, Thomas Tyrer & Co., Burgoyne, Burbidges & Co., Boake, Roberts & Co., Edward Cook & Sons, Price's Candle Company (Limited), the Broxbourne Oil Company, the Morgan Crucible Company, and others. The electrical department came out strong, and Professor Sylvanus P. Thompson lectured twice to different audiences on "The New Light." The arrangements for the conversazione were in the hands of a committee of students, with departmental secretaries. Mr. Arthur J. Tyrer—a third year's student—was chemical secretary.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.

Wholesale Houses, Agents, and Discounts.

SIR,—Some time ago we received with a bundle of invoices from our agent a letter, written to him, and evidently put in amongst our documents by mistake. The following is a copy of the letter, omitting names:—

DEAR SIR,—In answer to yours of yesterday's date, we beg to thank you for placing the order with us, and you may rely upon us giving same our best attention. . . . With regard to terms, in order to give you the very lowest prices, we priced the articles net, and from which we cannot offer to take a discount; but in all future transactions we shall be glad to meet your wishes by making the prices subject to any discount that may be arranged.

We wrote then to the wholesale house in question, asking them if it was their usual custom to add on, say, 10 per cent. for their customers to pay agents over and above the latter's commission, and here is their reply, received last mail:—

In reply, we would say that the matter of discount is generally one of arrangement with the buyer on this side. Our general mode is to quote net prices, as we did your agent here, without we are specially requested to the contrary; and we may here mention that we have accounts in which we give discounts of 2½ per cent., 2½ and 2½ per cent., 5 per cent., 5 and 2½ per cent., &c., and your agent, after we had quoted him net prices, wrote us and said he usually had 2½ to 5 per cent.

There is something significant in the underlining of the word "after" (which is not done by us, but by the authors of the epistle). Evidently, had the agent asked at first about his discount, he might have had practically any amount he liked to ask for, and we be the sufferers.

We should like to know whether this is a usual practice; if so, it should certainly be stamped out.

We enclose our names, and the names of agent and wholesale house (in confidence) on a separate sheet.

Yours faithfully,

Bombay, BOMBAY CHEMISTS. (11/48.)
February 1.

British Drug-travellers in New Zealand.

SIR,—Devonport must be a very "one-horse" place if Dr. Bakewell has never seen an English traveller in twenty-three years. Although I only spent five years in "the land of sin, sweat, and sorrow," I met representatives of several English houses during that time, some of them old acquaintances; and my experience has been not in cities, but in "the bush." It is a mistake to imagine that foreign articles are "better than British at the same price." The public know that as well as the drug-trade, as I remember a chemist who was supposed to stock German goods being refused a Friendly Society's contract solely on that account. American travellers are numerous and admittedly pushing, but the lines they offer are principally cheap imitations of well-known English patents, which some chemists foolishly stock, and which the public wisely do not buy.

Yours &c.,

PLATYPUS. (16/15.)

Anti-Cutting.

SIR,—I see no reason why manufacturers of patents should fix prices which would leave a very small margin of profit to the retailer, nor can I see how the retailer's position is to be improved by such action. I think the retailer is

quite entitled to 30 per cent. upon patents. If the fixed-price method is properly carried out, it does not matter whether the profit is 5 per cent. or 50 per cent., so far as the manufacturers or the wholesale houses are concerned. I know of a prominent firm in the photographic-goods line who refuse supplies to those who cut below regular prices, and the profit allowed to the retailer is 20 per cent. The method works well enough, and I do not suppose anybody is much inconvenienced by it.

If the advertised price is 1s. 1½d., there can be no reason why the fixed retail price should not be 1s. 1½d. None can benefit by the sacrifice of the 1½d. but the general public.

It is most difficult of all to understand why an association, formed of at least 50 per cent. of chemists, should submit to the degradation of acting in conjunction with the Grocers' Association. I can quite understand the manufacturers of patents wishing to take grocers by the hand. Their aim is presumably to take advantage of all channels for distribution of their nostrums. That respectable chemists should countenance any action of the kind is incredible. If manufacturers must take their friends the grocers into their confidence, obviously the right line for chemists to adopt is to wash their hands of the whole affair. Whatever terms are to be arrived at, the whole question should be settled with the chemists, and the grocers would later on be forced to fall in with the new method, or give patents up altogether. That they should be consulted is absurd, and holds the world of pharmacy up to ridicule and contempt. Perhaps the nostrum-makers are now for the first time confronted with the great difficulty of "choosing whom they will serve," but they may be quite sure that their position will never be a happy one in trying to serve the chemist and grocer at the same time. The immediate loss to the drug-world would not be great if chemists united to throw up patents altogether, and the ultimate gain would be incalculable. When patents can only be found alongside of casks of treacle and jars of marmalade their funeral is not far off.

Dumfries.

JAMES REID.

SIR,—“Common sense” is the term I should apply to the letter signed “S. Cardwell & Son” in your last issue. There is, however, one omission. What are we to charge those who persist in twelve months' credit?

Yours faithfully,

Dartmouth.

H. HUMPHRY.

SIR,—Referring to the letter which appears in your issue of February 22, signed “Live and Let Live,” it may be thought that as we originally used this motto in connection with our anti-cutting scheme the letter proceeded from us. Without commenting one way or the other on the remarks of your correspondent, we ask you to kindly allow us to disclaim any connection with the letter.

Yours faithfully,

FRAME FOOD COMPANY (LIMITED).

Lombard Road, Battersea, S.W., J. W. LEE, Manager.
February 24.

SIR,—I feel confident that as long as the manufacturers allow free cutting of their articles at any and all prices, so will substitutes increase on all sides. Give the retailer or distributor a fair margin and their interests will be guarded. Chemists, and now stores, since they have worked up a trade, resent the idea of acting as unpaid agents, and at the latter places the secret of their success is good bonuses to their assistants for pushing their own specialities. If manufacturers do not protect profits, they will soon find the old system of distribution so unhinged as to materially damage their interests.

Yours truly,

Llanelly, S.W., February 26.

MORGAN W. JAMES.

Shops (Early Closing) Bill.

SIR,—I trust that chemists of every city and town of importance will meet and discuss the Shops (Early Closing) Bill and the clause specially affecting them, sending their resolutions, with reasons for the same, to their parliamentary representatives.

From the reports you have published from time to time there seems to be no doubt that the great majority of chemists are in favour of having their hours restricted by law, having, no doubt, again and again experienced the futility of voluntary closing; but your advice last week to carefully consider clause 9 is, I think, most necessary.

Keeping in view, Sir, your evidence, and the evidence of others before the Select Committee of the House of Commons last year, it appears to me that if this Bill becomes law with clause 9 as it stands the drug-trade would be no better off than at present, and in some respects worse; for, according to that evidence, most articles which are kept in the average chemist's shop could be supplied after the appointed hour of closing, at the back door, if there be any, or, if not, by means of opening and closing the front door; and I take it that, unless the front door were constantly open, a chemist who lives at his shop could, if so inclined, do a considerable trade after the fixed closing-hour. Indeed, as the provisions of the Act would soon become known to the public, he would run the risk of alienating customers by refusing their demands. There are many chemists so situated, and this Bill would give them an unfair advantage over those who reside at a distance from their places of business. Your answer to a question by Dr. Farquharson that “After the chemist has closed his shop he does not wish customers to come; they are rather a nuisance,” is, except perhaps in regard to the “earthworms” to be found in all trades, the estimation in which chemists hold late customers; and upon that answer I think a great deal depends. The chemist regards the customer as a nuisance when he knows the article wanted could have been obtained by a little forethought during his business-hours, or could, without inconvenience, lie over till the morrow. No chemist worthy of the name would consider it a nuisance to be called upon to supply medicines to one really ill; and if a person is really ill, it is his duty to call a doctor. My experience is that 90 per cent. of late customers are thoughtless and indolent, and ask for commodities of which a supply is kept in well-ordered households. The rest are mostly cases for a doctor. In view of these facts I submit the following amendment of clause 9 for consideration:—

A pharmaceutical chemist or chemist and druggist shall not be liable to any fine under this Act for supplying medicines, drugs, or medical appliances after the hour appointed by an order under this Act for the closing of shops, provided the same are ordered by a qualified medical practitioner or by a qualified veterinary surgeon; but this section shall not be deemed to authorise the shop of a pharmaceutical chemist or chemist and druggist to be open after the said hour, save so far as may be necessary for the purpose aforesaid.

This amendment was considered by the Aberdeen and North of Scotland Society of Chemists and Druggists some time ago, and a large majority voted for it, so that I am not alone in my experience.

The chemist has too long been the slave of the public, and if the public are to be taught at all it would be better to do so a little more firmly than this Bill proposes or exclude us from it altogether.

Woodside, Aberdeen, February 25.

I am, &c.,

A. S. WEIR.

SIR,—The following letter I sent to Sir John Lubbock, and I append his reply:—

R^o EARLY-CLOSING BILL.

SIR,—As a chemist, with your kind permission, permit me to say a word about the special Saving Clause for chemists. This Clause will render the Act null and void, for two reasons. Firstly, unless you can decide what is a drug and what is a medical appliance—*e.g.*, a magistrate has just decided that wax is a drug; camphorated chalk is either a food or a drug, and a tooth-brush is certainly a medical appliance, so is a sponge and a hair-brush. Secondly, when is a shop to be considered open, and when shut? Most shops have no shutters, but a gate. When the gate is up and a little door in the gate is open, will the shop be then closed or open; or, if the side door be open and the front door closed, is the shop shut? Can anyone decide the import of the words “So far as may be necessary,” in reference to drugs, medical appliances, and when the shop is open? If the Clause remain and the Act perchance be enforced, it will cause a very great amount of vexatious proceedings. But it matters little whether it pass or not, because it will never come into operation, as you will not get two thirds of the chemists in any district to agree to close. To give your Act a better chance of success, if you think there is good to come from it, you should excuse, at present, chemists altogether from it; or impose a fine upon any employer

who should employ anyone over a certain number of hours in the week. This might be made applicable to nearly all work, although objectionable, is not so objectionable as forcing the closing of shops, and it would be legislating for the health and strength of the country if applied all round, and would gradually bring about an earlier closing hour in all businesses, while your Bill interferes with the liberty of the person and the freedom of trade.

Your humble servant,

Sir John Lubbock.

GEO. P. POND.

2 St. James's Square, S.W.

February 26, 1896.

SIR,—I beg to acknowledge the receipt of your letter.

The technical difficulty to which you refer now arises on Sundays. In reality I do not think it would be found a practical objection.

Yours sincerely,

G. P. Pond, Esq.

JOHN LUBBOCK.

The publishing of the above might be of interest to the trade.

Yours truly,

Fleet Street, E.C.

GEO. P. POND.

SIR,—Your investigations last year must have convinced the trade that the desire for shorter hours is almost universal, and the fortunate position which Sir John Lubbock has obtained for his Bill makes it very probable that it may pass this Session.

The clause dealing with the trade is a reasonable one when all the chemists of a town are solely chemists, but when one is a newsagent and another a tobacconist there seems to me a difficulty and an unfairness to the others, and an inducement for them to add an "exemp." trade.

Why is it necessary to exempt any trade? Who is to decide when the exemptions are *bonâ fide*?

Yours faithfully,

MIXED TRADE. (16/32.)

The Carbolic Death-roll.

SIR,—On reading your interesting table published in last week's issue, it will be a surprise to many besides myself that carbolic acid is not responsible for more accidental poisonings than thirty-four, considering the ease with which it can be obtained. I have seen in a "respectable" pharmacy carbolic acid put up for sale in ordinary reputed quart wine-bottles, and have known the pharmacist retail a penny-worth in a half-gill whisky-bottle!

Although I am a strong advocate for the scheduling of carbolic acid, I cannot overlook the fact that the poisoning caused by opium and its derivatives forms a strong argument in favour of those who are against the recognition of carbolic acid as a poison. In my humble opinion a great deal of this accidental opium-poisoning is caused by the careless retailing of such preparations in other than poison-bottles. Such conduct deserves the severest condemnation of every right-minded pharmacist.

With reference to death caused by carbolic acid, it is generally assumed that it is accompanied by great pain and agony. I was greatly surprised the other day when told by a physician in whom I place great confidence that there is not much pain if a big dose be taken, as the acid acts as a sort of local anæsthetic.

Yours truly,

ROHAMI. (17/53.)

Manager's Appeal.

SIR,—I continually read advertisements for managers in the Supplement, inserted by chemists who hide themselves behind a *nom de plume*. It would be only fair that the advertisers should at least state the near locality of the vacancy and the class of business done. We are occasionally told that the berth is in the "Midlands" or the "North," and this frequently leads to sending references, &c., into places one may have no desire to enter.

I should like to know why men in business who are independent (different from the assistants) resort to the *nom de plume*. Is it such a secret matter this filling of their vacancies?

Yours truly,

E. J. MORRIS.

LEGAL QUERIES.

Immediate information on pharmaco-legal matters is available in "Pharmacy and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and THE CHEMISTS' AND DRUGGISTS' DIARY.

16/48. *M. C.*—Yes; medicines may be rendered liable to stamp-duty by circulars on which they are advertised. You should get Alpe's "Handy Book of Medicine-stamp Duty," 2s. 6d. It may save you 10%, and a lot of trouble.

17/25. *Curious*—We have stated what we know is the Somerset House view in regard to breaking packets of your own proprietaries. To sell single powders unstamped they must be not only differently named, but quite different in composition.

16/9. *Cepia*.—It is held by the Pharmaceutical Society that sulphocyanide of ammonia does not come within the description "all metallic cyanides" in the poisons schedule. We are not aware that the question has ever come before a Court.

15/34. *Hendon*—If the soap contains arsenic we cannot see how it can be treated otherwise than as a preparation of arsenic, and, consequently, a poison of Part 1 of the schedule. It is on the same level as arsenical fly-papers.

15/14. *P. J.*—If a servant comes for poison in Part 1, to be entered to her mistress, the servant is the purchaser, who must sign the book, and who must be known or introduced to you.

13/52. *Tr. Opii*—There is no provision in the Sale of Food and Drugs Acts authorising the purchaser of an article for analysis to demand the return from the vendor of the third part of the purchase left with him, in the event of the public analyst's certificate proving satisfactory.

18/57. *Nondescript*.—The expression "all poisonous vegetable alkaloids" means exactly what it says. It is not necessarily limited to alkaloids of scheduled poisons. It would certainly include such alkaloids as cocaine, picrotoxine, veratrine, and hyoscyamine.

MISCELLANEOUS INQUIRIES.

Back numbers containing formulae, educational or other specific information can be obtained from the Publisher.

N.B.—All queries should be accompanied by the business card of a subscriber, or the address label from THE CHEMIST AND DRUGGIST wrapper. We destroy anonymous letters. We do not answer queries of the kind here dealt with by post. We ask that separate queries shall be written on separate sheets of paper.

3/61. *Varnish*.—Ebony-staining Varnish.—There is no varnish which will stain the wood, for the resin prevents its permeating, and when the varnish wears off the wood is found to be unstained. The wood is generally stained first—e.g., with a decoction of galls or logwood, then with solution of copperas. After drying, varnish with a good oak-varnish. You may make a passable varnish by dissolving a drachm of nigrosin in 2 oz. of spirit, and adding the solution to 10 oz. of spirit-varnish. This stains to some extent, but the surface is not so fine as that obtained with carriage-varnish, for example. It is unnecessary for us to give the formula for the latter, as you could not make it though you were to try.

4/74. *W. T. G.*—(1) Acetylene.—See reply to "Gas," C. & D., February 1, page 207 (2) Electrical Apparatus.—F. Danton & Co., 142 St. John Street, E.C.

5/71. *J. T.* asks:—"What will dissolve red and white lead made into cement with linseed oil, and used for fixing the joints of stone cisterns? He wants to loosen a cistern that has been cemented with the above." [We understand that plumbers use ordinary paraffin oil for this purpose. Let the oil soak into the joints for twelve hours, then use a chisel. Acids cannot be used, for they would affect the iron more readily than the cement.]

5/59. *Unguentum*.—Herbal Eye-ointment:—

Ext. belladonnæ	gr. v.
M. Crem. frigid.	3j.

Perhaps this may suit your purpose.

5/6. *Nunquam*.—A mixture of sulphuric acid (1 part) and water (4 parts) is commonly used for Etching on Steel.

6/3. *S. E.*—(1) What do you mean by Laboratory Work? If the ordinary operations of pharmacy, see Caspari's "Treatise on Pharmacy," reviewed in our Win'er issue, page 155. (2) Try spirit of chloroform for covering the smell of *Viburnum prunifolium*.

6/22. *Calyx*.—(1) Leeches are hermaphrodite; but they mutually impregnate each other. They are capable of fertilising themselves. (2) *Euchrisma*.—*C. & D. DIARY*, 1894, page 362.

6/22. *Melonia*.—Petroleum Emulsion.—See *C. & D.*, December 22, 1894, page 893, and October 26, 1895, page 643. We prefer the former.

6/58. *Fefus*.—Non-exciseable Coca-wine:—

Ext. coceæ liq. sol.	3j.
Cocainæ hydrochlor.	gr. viij.
Vin. rubri ad	℥j.

Mix, set aside for at least a month, then filter.

The above provides a palatable wine fully medicated according to the Revenue requirements. The Inland Revenue authorities do not say that you must add coca-leaf equivalent to $\frac{1}{2}$ gr. of cocaine to each fluid ounce, but $\frac{1}{2}$ gr. of cocaine—as a matter of fact, they say 1 gr., but have passed half that. Half a grain of cocaine is a safe dose; even a grain may be taken without injury. You should have the wine approved by the Inland Revenue authorities before you sell it. Submit a sample, with copy of the formula, to the local supervisor.

6/5. *P. H. M.*—Oilskins.—Boiled linseed oil is used in making these, and the best oilskins are those in which the oil alone is used, without the addition of driers. Borate of lead is a suitable drier, as it does not darken the colour. Six ounces of the borate to 12 gallons of oil is the proportion to use.

7/24. *Emulsion*.—(1) Cod-liver Oil Emulsion.—See *C. & D.*, August 24, 1895, page 319. (2) Starch glaze.—*C. & D.*, October 26, 1895, page 644.

7/11. *G. D.*—The fact does not seem to be sufficiently appreciated in the drug-trade that the manufacture of Hard Varnishes is an art which is utterly beyond the inexperienced. It is not a case of merely dissolving resins in a solvent, but the resins have to be prepared by heating at a high temperature in a special kind of pot under strictly regulated conditions, so that it is cheaper and easier for chemists to buy such varnishes than to make them. However, here is a formula for you:—

Gum kauri	8 lbs.
Linseed oil	gallons.
Spirit of turpentine	5½ "

Run (*i.e.*, heat) the gum with the oil until it strings well, and after cooling add the turpentine.

7/4. *Sulphur*.—Malted Food for Infants.—Using the ingredients which you mention, all that you have to do is to mix them. The best proportions are—

Biscuit-powder	2 lbs.
Sugar of milk	3 oz.
Dried extract of malt	1 "

Mix thoroughly.

8/62. *Orion*.—(1) We cannot suggest anything more effectual than cotton-wool. (2) For Alumnae see the *C. & D. DIARY*, 1895, page 408. To the information there given we may add that it is used in cutaneous affections, and it is stated that the ophthalmologist will find it of service in temporarily checking the lachrymal secretion during an examination of the eye, by dropping in a few drops of a 4-per-cent. solution.

8/57. *Inquirer*.—Headache snuff:—

Menthol	gr. ij.
Cocaine hydrochloride	gr. ij.
Sugar of milk	3j.

Triturate for five minutes, and add—

Arrowroot	5vj.
Compound tragacanth powder	3j.

Continue the trituration another five minutes, and sift.

8/27. *A. J. B.*—To Smooth the Crinkled Parchment, place a piece of damp (but not wet) paper at the back of it, and put it under pressure for ten days or more, protecting the written side with tissue-paper. You may renew the damp paper daily if it seems necessary.

9/70. *Jumbo*.—(1) The best Non poisonous Mice-poison (excuse the paradox) is powdered squill. Mix it with its own weight of powdered liquorice, and direct it to be mixed with toasted oatmeal. (2) You will find all about poisons in the *C. & D. DIARY*, page 220.

9/20. *Questor*.—Essence of Rennet.—There is a formula in the *C. & D. DIARY*, 1894, page 362. The following is a better one:—

Rennet (free l from salt and chopped fine) ..	3vj.
Salt	3iv.
Rectified spirit	3x.
Water	3xl.

Macerate four days, add sherry 3v., and after a day strain, then add—

Glycerine of tannin	gtt. x.
Fullers' earth	3j.

Again shake, and set aside for a week; decant the clear essence, and filter the sediment.

9/8. *Ignoramus*.—(1) See reply to "Fefus." Omit the cocaine if you want an exciseable wine. (2) No; we do not consider coca-wine made from cocaine without the leaf as good as one made from the leaf; it does not give the same "staying" power. (3) New port wine is best. (4) See reply to "Fefus."

9/56. *Irishman*.—The detannation of the wine is the best plan for overcoming precipitation of quinine as tannate in making Orange Quinine Wine. To do this add to 20 gallons of the orange wine 1 oz. of Cox's gelatine broken into small bits, mix well, and set aside for a few weeks to settle. This should not be done in an oak cask, unless the cask has been enamelled.

10/17. *Southerner*.—Orchitic Suppositories are made from orchitic extract—*i.e.*, extract of the testis. See the *C. & D. DIARY*, page 148. It is called "didymin" by Burroughs, Wellcome & Co. (*DIARY*, page 201).

9/26. *T. F. B.*—We have your postcard, but not your query.

10/38. *B. H. B.*—Vaseline oil will do very well indeed for making Carbolic Oil, better than olive or rape oil. There is no doubt that oil made with acid. carbol. liq. would be more effectual, but the emulsified appearance is against it.

10/5. *Needles.*—We do not see how it is at all possible for you to make a syrup by the formula which you send us. For 1 pint of it you have exactly 16½ oz. solids. You should try the B.P.C. recipe.

8/12. *Apprentice.*—We do not know what you mean.

60/40. *Some Nom-de-plume.*—We cannot think of any that you would recognise. Your instruction reminds us of the Irishman who addressed his letter, "My Mother, Dublin." The Gold-paint which you mention is a solution of celluloid shavings 1 part in 20 parts of acetate of amyl. In this the powder is suspended.

11/26. *Calcutta.*—Lanoline is best emulsified by means of powdered soap—3ss. to ʒj. of lanoline and ʒj. of water. We do not think the addition of tannin to a face-lotion advisable, and certainly it will not be appreciably absorbed by the skin under any conditions.

12/22. *C. D.*—Please refer to the advertisement, page 356 of this year's DIARY. We described Paste Chlorophyll (this brand) two years ago, so that your wholesale house is not particularly well posted on the matter.

12/70. *Medica.*—Sandalwood Oil has not, as far as we are aware, been used as a topical application for gonorrhœa. It is a local irritant, but not more so than eucalyptus oil, and there is no sound reason why it should not be tried in the form of bougies.

12/69. *Cumbrian.*—You will find a formula for perfume like "Mona Bouquet" in our 1895 DIARY.

15/45. *Argon.*—We do not know of any published list of Welsh chemists exclusively.

16/67. *A Very Old Subscriber* should have known better than write to us anonymously.

132/96. *B. H. B.*—The formula for cleansing-drink given in "V. C. P." (page 30) is suitable for the purpose any time up to fourteen days after calving, and its qualities will remain unimpaired for a considerable time if wrapped in wax-paper, so as to protect it from damp.

16/21. *F. A.*—(1) The ointment is non-poisonous. We take it that you assured yourself that your sulph. nig. is free from arsenic. (2) We fear you can do nothing with the gasometer-water. It would be a costly business to deodorise it. Cannot it be poured gradually upon some waste land? It would do the land good, and would give least trouble that way.

6/64. *R. W. M.*—(1) Aromatic Ginger-ale Essence:—

Cort. cinnamom.	..	..	..	..	..	3i
Caryophylle	..	..	..	..	..	3iij.
Sem. cardamom.	..	..	..	..	..	3ss.
Fruct. capsici	..	..	..	..	..	3j.
Ess. zingib. sol.	..	..	..	..	..	ʒij.

Macerate four days and filter. Colour with caramel.

(2) There is no first-class work of the kind you mention. Several books are published, but they are all disappointing.

* * * Some letters, dispensing notes, and replies to correspondents are in type which we have been unable to find room for in this issue.

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, postcard replies to the following:—

16/65. Maker of Nyd cases used in "first aid for the wounded."

68/37. Makers of leather cases for medicine tumblers.

19/39. Barilla-bark (*sic*) soap, used for eczema; said to be an Irish soap: where obtainable?

15/64. Makers of C. C. & F. chlorodyne?

16/28. Name of a lotion much used by American ladies for eradicating wrinkles, &c.; said to be chiefly composed of talc.

Next Week.

Monday, March 2.

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Professor J. M. Thomson on "Zinc and Tin Compounds Used in Building."

Society of Chemical Industry, Burlington House, W., at 8 P.M. Messrs. Cross and Bevan on "Artificial Silk."

Tuesday, March 3.

Royal Institution of Great Britain, at 3 P.M. Professor Charles Stewart on "The External Covering of Plants and Animals: Its Structure and Functions."

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. "The Commercial Prospects of English East Africa and British Central Africa," by Mr. G. Scott Elliot.

Wednesday, March 4.

Midland Chemists' Assistants' Association, Exchange Rooms, Birmingham, at 8.30 P.M. Musical and social evening.

Brighton Junior Association of Pharmacy. Social evening at 9 P.M.

Plymouth and District Chemists' Association, Foresters' Hall, at 3 P.M. Discussion on "Anti-cutting Scheme," by Mr. Glyn-Jones and others.

Society of Chemical Industry, University College, Nottingham, at 7.30 P.M. Mr. L. Archbutt, F.I.C., will describe an evaporation-test for cylinder-oils. The following paper is down for discussion: "Some Properties of Ferric Phosphate," by Mr. R. M. Caven, B.Sc.

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. "Röntgen's Photography of the Invisible," by Mr. A. A. Campbell Swinton.

Thursday, March 5.

Chemical Society, Burlington House, at 8 P.M. Papers to be read:—"On the Explosion of Cyanogen," by H. B. Dixon, E. H. Strange, and E. Graham. "On the Mode of Burning of Carbon," by H. B. Dixon. "On the Detonation of Chlorine Peroxide," by H. B. Dixon and J. A. Harker. "The Constitution of a New Acid Resulting from the Oxidation of Tartaric Acid," by H. J. H. Fenton.

Chemists' Assistants' Association. Annual dinner, Kiug's Hall, Holborn Restaurant, at 8 P.M.

Liverpool Pharmaceutical Students' Society, University College, at 8.30 P.M. Conversation and exhibition of lantern-slides.

Glasgow and West of Scotland Pharmaceutical Association, 94 West Regent Street, Glasgow, at 9.15 P.M. "Open meeting."

Plymouth and District Junior Chemists' Association, Foresters' Hall, at 8.30 P.M. Mr. J. Kinton Bond, B.A., B.Sc., on "The Metric System."

Friday, March 6.

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, at 9.15 P.M. Mr. A. S. Birnie on "The Darwinian Theory," and Mr. A. Thwaites on "Fluid Extracts."

Aberdeen Junior Chemists' Association, 21 Bridge Street, at 9.30 P.M. Mr. C. Forbes will read a humorous paper.

Saturday, March 7.

Royal Institution of Great Britain, at 3 P.M. Lord Rayleigh on "Light."